




Material Safety Data Sheet

NFPA 	HMIS <table border="1"><tr><td>Health Hazard</td><td>1</td></tr><tr><td>Fire Hazard</td><td>4</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	1	Fire Hazard	4	Reactivity	0	PPE 	Transport Symbol 
Health Hazard	1								
Fire Hazard	4								
Reactivity	0								

Issuing Date 14-March-2005

Revision Date 27-Oct-10

Revision Number 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Aquascape Foam Cleaner
22011

Recommended Use Solvent Cleaner

Supplier Address Aquascape Inc.
901 Aqualand Way
St. Charles, IL 60174
(630) 659-2000

Emergency Telephone Number 1-866-877-6637

2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Contents under pressure.
Flammable gas. May cause flash fire.
Harmful by inhalation, in contact with skin and if swallowed.
Irritating to eyes, respiratory system and skin.
Inhalation of vapors over long time can cause anesthetic effect leading to death.
Vapors reduce oxygen available for breathing.

Appearance Colorless

Physical State Liquid Aerosol

Odor Faint hydrocarbon

Potential Health Effects

Principle Routes of Exposure Inhalation, Skin contact, Eye contact.

Acute Toxicity

Eyes

May cause severe eye irritation. May cause slight corneal injury. Vapor may cause eye irritation.

Skin

Essentially nonirritating to skin. May cause drying and flaking of the skin. Prolonged contact may cause dermatitis.

Inhalation

Concentrations for 10 minutes may cause dizziness. In confined or poorly ventilated areas, vapor can easily accumulate and can cause unconsciousness and death due to displacement of oxygen. Excessive exposure may cause headache, dizziness, anesthesia, drowsiness, and other central nervous system effects.

Ingestion

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. May cause headache, dizziness, diarrhea and general weakness. Large doses may result in red blood cell hemolysis.

Effects of Repeated Exposure:

Repeated or prolonged exposure may be anesthetic or narcotic effects: dizziness and drowsiness may be observed. In animals, effects have been reported on the following organs: Blood. Kidney. Liver. Development of cataracts has been reported in laboratory animals after prolonged repeated skin exposure to acetone.

Aggravated Medical Conditions Skin contact may aggravate preexisting dermatitis.

Interactions with Other Chemicals Irritants. Use of alcoholic beverages may enhance toxic effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	EINECS #	Weight %
Acetone	67-64-1	200-662-2	85
Propane / Isobutane mixture	68476-86-8	270-705-8	15

4. FIRST AID MEASURES

General Advice	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If irritation persists, Obtain medical attention, preferably from an ophthalmologist.
Skin Contact	Wash skin with soap and water. If symptoms persist, call a physician. Remove and wash contaminated clothing before re-use.
Inhalation	Move victim to fresh air. Apply artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Call a physician or transport to a medical facility.
Ingestion	Call a physician or Poison Control Center immediately. Do not induce vomiting; if vomiting occurs spontaneously; keep head below hips to prevent aspiration of liquid into lungs. Never give anything by mouth to an unconscious person.
Notes to Physician	Maintain adequate oxygenation of the patient. Over Exposure may increase "myocardial irritability". Do not administer sympathomimetic drugs such as epinephrine unless absolutely necessary. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Provide this (M) SDS sheet to emergency personnel.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Flammable gas. Contains flammable propellant. Aerosol cans exposed to fire can rupture and become flaming projectiles. Propane is heavier than air and may travel a considerable distance to an ignition source. Keep away from open flame and other sources of ignition. Rapid flame propagation and flashback possible. Do not allow smoking in storage areas or when handling.
Flash Point	-104°C / -155°F
Suitable Extinguishing Media	Use extinguishing agent suitable for type of surrounding fire. Dry chemical or CO ₂ . Water fog or fine spray, fog or regular foam. Move containers from fire area if you can do it without risk.
Explosion Data	
Sensitivity to mechanical impact	None
Sensitivity to static discharge	Yes. Flammable mixtures of this product are readily ignited by static discharge.

Specific Hazards Arising from the Chemical

Chemical under presser in conjunction with flammable propellant. Ruptured cylinders may rocket.

Protective Equipment and Precautions for Firefighters

Wear self-contained breathing apparatus and protective suit.

NFPA	Health Hazard 1	Flammability 4	Stability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 1	Flammability 4	Stability 0	Personal Precautions -

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation. Take precautionary measures against static discharges. Use personal protective equipment. Keep people away from and upwind of spill/leak.
Methods for Containment	If possible, turn leaking containers so that gas escapes rather than liquid. Allow substance to evaporate. Dike to collect large liquid spills.
Methods for Cleaning Up	Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal. Do not direct water at spill or source of leak.
Other Information	Ventilate the area. Keep personnel out of low areas and confined or poorly ventilated areas. No smoking in spill area.

7. HANDLING AND STORAGE

Handling	Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Keep away from open flames, hot surfaces and sources of ignition. No smoking in area. Avoid ignition of vapors by static electricity discharge. Avoid breathing vapors or mists. Contents under pressure. Do not puncture or incinerate containers. Do not stick pin or any other sharp object into opening on top of can. Empty containers may contain residue which may form explosive vapors.
Storage	Keep containers tightly closed in a cool, well-ventilated place. <u>Keep in properly labeled containers. Keep in an area equipped with sprinklers.</u> Keep out of the reach of children. Ideal storage temperature is 16-32 °C / 60 – 90 °F. Storage above 32 °C / 90 °F will reduce its shelf-life. Never keep at temperatures above 48.8-°C / 120-°F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone	TWA: 500 ppm 1,188 mg/m ³	Ceiling: 750 ppm Ceiling: 1,800 mg/m ³	590 mg/m ³
Isobutane	TWA: 1000 ppm	N/A	N/A
Propane	TWA: 1000 ppm	TWA: 1000 ppm 1,800 mg/m ³	800 ppm 1,800 mg/m ³

NIOSH IDLH: Immediately Dangerous to Life or Health

Engineering Measures
 Showers
 Eyewash stations
 Ventilation systems

Personal Protective Equipment
Eye/Face Protection Chemical splash goggles preferred. Safety glasses with side shields.
Skin and Body protection Chemically resistant gloves. Examples of preferred glove barrier materials include: Natural rubber (latex), Neoprene, Polyethylene. Polyvinyl alcohol (PVA). Lightweight protective clothing.

Respiratory Protection

None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations.

Hygiene Measures

When using, do not eat, drink or smoke. Avoid ingestion of even very small amounts; wash hands and face before smoking or eating.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Compressed clear liquid	Odor	Characteristic solvent odor
Odor Threshold	No information available	Physical State	Liquid Aerosol
pH	No information available		
Flash Point	-104°C / -156°F	Autoignition Temperature	450°C / 842°F
Decomposition temperature	No data available	Boiling Point/Range	-42°C / -44°F (Propane)
Melting Point/Range	No data available		
Flammability Limits in Air	LEL: 2.1% UEL: 9.5%	Explosion Limits	No data available
Specific Gravity (H2O =1)	0.87	Water Solubility	Completely miscible
Solubility	Compatible.	Evaporation Rate (H2O = 1)	< 1
Vapor Pressure	533. hPa (400. mmHg) at 39.5°C 245.3 hPa (184. mmHg) at 20.°C	Vapor Density (Air = 1)	> 1
VOC Content	No data available	EPA VOC (g/l)	No data available
Partition Coefficient (n-octanol/water)	Log Pow: -0.24	Density	0.79 g/cm ³

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition. Temperatures above 48.8 °C / 120 °F.
Incompatible Products	Strong bases, Strong acids, Strong oxidizing agents. Finely powdered metals, Amines, Ammonia, Chlorine, Halogens, Phosphorous Oxychloride.
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (Nox), Hydrogen cyanide.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION**Acute Toxicity****Repeated Dose Toxicity**

Symptoms of excessive exposure may be anesthetic or narcotic effects; dizziness and drowsiness may be observed. In animals, effects have been reported on the following organs: Blood. Kidney. Liver. Development of cataracts has been reported in laboratory animals after prolonged repeated skin exposure to acetone.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Acetone	9750 mg/kg (Rat)	7,426 mg/kg (guinea pig)	50,100 mg/m ³ / 8H (Rat)
Isobutane			658 mg/L (Rat) 4 h
Propane		658 mg/kg (Rat)	

Chronic Toxicity

Inhaled vapors may cause drowsiness and dizziness. May be harmful if inhaled. Causes respiratory tract irritation. May be harmful if absorbed through skin. Causes skin irritation. Repeated exposure may cause skin dryness or cracking. Causes eye irritation. May be harmful if swallowed. The target organs for acetone are Liver and Kidney.

Carcinogenicity

There are no known carcinogenic chemicals in this product.
NTP No component of this product is identified as a carcinogen or potential carcinogen by NTP.
IARC No component of this product is identified as a carcinogen or potential carcinogen by IARC.
OSHA: Regulated No component of this product is identified as a carcinogen or potential carcinogen by OSHA.

Mutagenicity

Acetone, has been toxic to the fetus in lab animals at doses toxic to the mother.

Reproductive Toxicity

Acetone, in vitro genetic toxicity studies were predominantly negative.

Target Organ Effects

Liver, Kidney

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

12. ECOLOGICAL INFORMATION

Chemical Fate

Data for Component: Acetone.

Movement & Partitioning. Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).

Henry's Law Constant (H): 1.38E-5 atm * m³ / mole; 25°C Estimated

Partition coefficient, n-octanol / water (log Pow): -0.24 Measured

Partition coefficient, soil organic carbon / water (Koc): 0.37 – 2.0 Estimated

Distribution in Environment: Mackay Level 1 Fugacity Model:

Air	Water	Biota	Soil	Sediment
44.3%	55.6%	< 0.1%	< 0.1%	< 0.1%

Chemical Name	Toxicity to Algae	Toxicity to Fish	Microtox	Daphnia Magna (Water Flea)
Acetone		LC50, rainbow trout 5,500 mg/l – 96 hour	IC50, OECD 209 test activated sludge, respiration inhibition, 3H: > 1,000 mg/l	EC50 – 13,500 mg/L 48 h
Propane	No Information available			No Information available

Chemical Name	Log Pow
Acetone	< 3.0
Isobutane	2.88
Propane	2.3

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Do not dump into any sewers, on the ground, or into any body of water. Dispose of in accordance with Local, State/Provincial, and Federal Regulations. This product may produce hazardous vapors in a closed disposal container creating a dangerous environment. Refer to 40 CFR 260 – 299 for complete waste disposal regulations. Contact a licensed professional waste disposal service to dispose of this material. For unused and uncontaminated product the preferred options include sending to a licensed, permitted: Recycler, Re-claimer, Incinerator or other thermal destruction facility.

Contaminated Packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

<u>DOT</u>	
Proper Shipping Name	Consumer commodity
Hazard Class	ORM-D
Description	Consumer commodity, ORM-D
<u>TDG</u>	
UN-No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Description	Aerosols, 2.1, UN1950
<u>MEX</u>	
UN-No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Description	UN1950 Aerosols, 2.1
<u>ICAO</u>	
UN-No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
Description	Aerosols, UN1950
<u>IATA</u>	
UN-No	UN1950
Proper Shipping Name	Aerosols, flammable
Hazard Class	2.1
ERG Code	10L
Description	UN1950, Aerosols, flammable, 2.1
<u>IMDG/IMO</u>	
UN-No	UN1950
Proper Shipping Name	Aerosols
Hazard Class	2.1
EmS No.	F-D, S-U
Description	UN1950, Aerosols, 2

Note: Transportation information provided is for reference only. Client is urged to consult 49 CFR 100 – 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL / NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
CHINA	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

U.S. Federal Regulations

OSHA Hazard Communication Standard

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

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

U.S. State Regulations

California Proposition 65

This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels that would require a warning under the statute.

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:		
Chemical Name	CAS-No	Amount
Acetone	67-64-1	>= 60.0 - <= 100.0%
Propane / Isobutane mixture	68476-86-8	>= 10.0 - <= 30.0%

Massachusetts (Worker and Community Right-To-Know Act): Massachusetts Right to Know Components:		
Chemical Name	CAS-No	Amount
Acetone	67-64-1	>= 60.0 - <= 100.0%
Propane / Isobutane mixture	68476-86-8	>= 10.0 - <= 30.0%

New Jersey (Worker and Community Right-To-Know Act): Right to Know Components:		
Chemical Name	CAS-No	Amount
Acetone	67-64-1	>= 60.0 - <= 100.0%
Propane / Isobutane mixture	68476-86-8	>= 10.0 - <= 30.0%

International Regulations**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

A Compressed gases
B5 Flammable aerosol

**16. OTHER INFORMATION**

Issuing Date	14-March-2005
Revision Date	27-Oct-2010
Revision Note	Update MSDS

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS