Safety Data Sheet

Version: 008
Issued on: 6.11.2024
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1. Identification

Product identifier	Aqua-Tite® Green or SPG
Other means of identification	
Compound number	400C
Synonyms	Water repellent
Recommended use	Post treatment
Recommended restrictions	Use in accordance with manufacturer’s recommendations.
Manufacturer/Supplier/Distributor information	
Company name	Marlen Textiles
Address	500 Orchard Street New Haven, Missouri 63068
Telephone	(573)-237-4444 (Monday through Friday, 8AM to 4PM CST)
Website	www.marlentextiles.com
Emergency number	CHEMTREC (800) 262-8200

2. Hazard(s) identification

OSHA defined hazards	Not Classified
GHS classification	Not a dangerous substance or mixture according to GHS.
GHS label elements	No label required according to GHS requirements.
Hazard(s) not otherwise Classified (HNOC)	Combustible liquid

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Petroleum distillates	64742-47-8	<10.0
Decamethylcyclopentasiloxane	541-02-06	75.0-85.0
Titanium tetrakis(2-ethylhexanolate)	1070-10-6	1.5-2.5
Tris (2-ethylhexyl) isopropyl titanate	106193-76-4	<0.4
d-Limonene	5989-27-5	<2.0
Xylene	1330-20-7	0.3-0.8
Ethylbenzene	100-41-4	<0.4

Composition comments When used for its intended purpose, this material is classified as not hazardous under Federal OSHA 29 CFR 1910.1200 regulations. This SDS contains valuable information critical to the safe handling and proper use of this product. The SDS should be retained and available for employees and other users of this product.

4. First-aid measures

Inhalation Vapors may irritate the respiratory system. Remove person to fresh air, and keep under observation. If symptoms persist, seek medical attention.

Skin contact Rinse area with warm water for a minimum of 15 minutes. Remove contaminated clothing and wash accordingly before reuse. Get medical attention if irritation develops or persists.

Eye contact Do not rub eyes. Flush eyes thoroughly with flowing water for a minimum of 15 minutes. If irritation persists, seek medical attention.

Ingestion If swallowed, rinse mouth with plenty of water. Seek medical attention immediately. DO NOT induce vomiting. DO NOT administer anything by mouth to an unconscious person. DO NOT leave victim unattended.

Most important symptoms/ effects, acute and delayed Vapors may irritate the respiratory system.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved.

5. Fire-fighting measures

Suitable extinguishing media On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide (CO_2), dry chemical or water spray.

Unsuitable extinguishing media High volume water jet

Hazardous combustion products Carbon oxides, silicon oxides, formaldehyde, metal oxides, and chlorine compounds.

Specific hazards arising from the chemical	Do not use a solid water stream as it may scatter and spread fire. Vapors are combustible and heavier than air and can travel across the ground reaching remote ignition sources and causing a flashback fire over considerable distance. Static electricity can accumulate and may ignite vapors. Prevent possible fire hazard by bonding and grounding or inert gas purge.
Special protective equipment and precautions for firefighters	Fire fighters and others exposed to products of combustion should wear full fire turn out gear and self-contained breathing apparatus (pressure demand/NIOSH approved of equivalent). Exposure to combustion products may be hazard to health.
Fire-fighting equipment/ instructions	Use standard firefighting procedures and consider the hazards of other involved materials.
Specific methods	Water can be used to cool fire exposed containers.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Observe all personal protection equipment recommendations in Section 8. Remove all sources of ignition.
Methods and materials for containment and cleaning up	Clean spilled area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Non-sparking tools should be used. Soak up with inert absorbent material. Suppress (knock down) gases/vapors/ mists with water spray jet.
Environmental precautions	Avoid discharge to drains, sewers, and other water systems by diking or other appropriate containment. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

7. Handling and storage

Precautions for safe handling	Handle in accordance with good industrial hygiene and safety practices. Use with adequate ventilation. Avoid eye exposure. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed and tightly sealed. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage, including any incompatibilities	Store container closed and tightly sealed in a well ventilated area.

8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3 (100 ppm)
Xylene (CAS 1330-20-7)	PEL	435 mg/m3 (100 ppm)
Decamethylcyclopentasiloxane (CAS 541-02-06)	No PEL or human data available	

US. ACGIH Threshold Limit Values

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	TWA	87 mg/m3 (20 ppm)
Xylene (CAS 1330-20-7)	TWA	434 mg/m3 (100 ppm)
	STEL	651 mg/m3 (150 ppm)

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits

Components	Type	Value
Ethylbenzene (CAS 100-41-4)	TWA	435 mg/m3 (100 ppm)
	STEL	545 mg/m3 (125 ppm)
Xylene (CAS 1330-20-7)	TWA	435 mg/m3 (100 ppm)
	STEL	655 mg/m3 (150 ppm)

Biological occupational exposure limit values

Components	Biological Specimen	Permissible Concentration	Basis
Ethylbenzene (CAS 100-41-4)	Urine	0.7g/g creatinine	ACGIH BEI
Xylene (CAS 1330-20-7)	Urine	1.5g/g creatinine	ACGIH BEI

Appropriate engineering controls Observe occupational exposure limits and minimize the risk of exposure. Local and general ventilation are recommended for use indoors, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection Use approved safety glasses as a minimum.

Skin protection

Hand Use good industrial hygiene practices to minimize skin contact. For prolonged of repeated skin contact use chemical resistant gloves.

Other Appropriate work clothing is recommended.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits or to an acceptable level an approved respirator must be worn. Follow OSHA respirator protection program requirements (OSHA 1910.134) for all respirator usage. Use a NIOSH/MSHA approved air purifying respirator as needed to control exposure.

General hygiene Observe good personal hygiene measures, such as washing after handling chemicals and before eating, drinking and/or smoking. Routinely wash work clothing and protective equipment separately from regular wash.

General information These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions. For further information regarding aerosol inhalation toxicity, please refer to the guidance document regarding the use of silicone-based materials in aerosol applications that has been developed by the silicone industry (www.SEHSC.com) or contact Marlen Textiles customer service.

9. Physical and chemical properties

Appearance	
Physical state	Liquid
Color	Clear to pale yellow
Odor	Mild solvent odor
Odor threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	>350˚F
Flash point	155-160˚F (Closed cup method)
Evaporation Rate	Slower than ether
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	0.7
Flammability limit – upper (%)	No data available
Explosive limit – lower (%)	No data available
Explosive limit – upper (%)	No data available
Vapor pressure	No data available
Vapor density	Heavier than air
Relative density	0.930 (H2O=1)
Solubility(ies)	Insoluble in water
Partition coefficient (n-octanol/water)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	Water thin
Other information	
Density	7.760 lbs/gal
VOC (Wt %)	<10

10. Stability and reactivity

Reactivity	Not available
Chemical stability	Compound is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, open flames, sparks or any source of ignition.
Incompatible materials	Oxidizing agents, water and strong acids
Hazardous decomposition products	Thermal breakdown of the product during a fire or very high heat conditions may evolve the following: formaldehyde, 2-ethylhexan-1-ol, propan-2-ol.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Vapors may irritate the respiratory system.
Ingestion	Ingestion may cause irritation and stomach discomfort.
Skin contact	Prolonged or repeated contact may cause irritation.
Eye contact	Direct contact may cause irritation.

Symptoms related to the physical, chemical and toxicological characteristics Vapors may irritate the eyes, throat and respiratory system causing sneezing and/or coughing.

Toxicological effects

Acute toxicity Not classified based on available information.

Ingredients:

Decamethylcyclopentasiloxane

Acute oral toxicity	LD50 (Rat): > 24,134 mg/kg Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	LC50 (Rat): 8.67 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity Remarks: Based on test data

Xylene

Acute oral toxicity	LD50 (Rat): 4,300 mg/kg Method: Directive 67/548/EEC, Annex V, B.1.
Acute inhalation toxicity	Acute toxicity estimate: 11 mg/l Test atmosphere: vapor Method: Expert judgment
Acute dermal toxicity	Acute toxicity estimate: 1,100 mg/kg Method: Expert judgment Remarks: Based on harmonised classification in EU regulation 1272/2008, Annex VI

Ethylbenzene

Acute oral toxicity	LD50 (Rat): 3,500 mg/kg
Acute inhalation toxicity	LC50 (Rat): 17.2 mg/l Exposure time: 4 h Test atmosphere: vapor
Acute dermal toxicity	LD50 (Rabbit): > 5,000 mg/kg

Skin corrosion/irritant Not classified based on available information.

Ingredients:

Xylene

Species: Rabbit
Result: Skin irritation

Serious eye damage/ eye irritant Not classified based on available information.

Ingredients:

Xylene

Species: Rabbit
Result: Irritation to eyes, reversing within 7 days

Respiratory sensitization Not classified based on available information.

Skin sensitization Not classified based on available information.

Ingredients:

Xylene

Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Method: OECD Test Guideline 429

Ethylbenzene

Test Type: Human repeat insult patch test (HRIPT)
Routes of exposure: Skin contact
Result: negative

Germ cell mutagenicity Not classified based on available information.

Decamethylcyclopentasiloxane

Genotoxicity in vitro Test Type: Bacterial reverse mutation assay (AMES)
Result: negative
Remarks: Based on test data

Genotoxicity in vivo Test Type: Unscheduled DNA synthesis (UDS) test with mammalian liver cells in vivo
Species: Rat
Application Route: inhalation (vapor)
Result: negative
Remarks: Based on test data

Germ cell mutagenicity - assessment Animal testing did not show any mutagenic effects.

Carcinogenicity

Ethylbenzene:

Species: Rat
Application Route: Inhalation
Exposure time: 104 weeks
Result: positive
Remarks: The mechanism or mode of action may not be relevant in humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Group 2B Possibly carcinogenic to humans

Ethylbenzene 100-41-4

ACGIH Confirmed animal carcinogen with unknown relevance to humans

Ethylbenzene 100-41-4

OSHA No ingredient of this product preset at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

NTP Report on Carcinogens No ingredient of this product preset at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

Reproductive toxicity Not classified based on available information.

Decamethylcyclopentasiloxane:

Effects on fertility Test Type: Two-generation reproduction toxicity study
Species: Rat
Application Route: Inhalation
Symptoms: No effects on fertility.
Remarks: Based on test data

Effects on fetal development Test Type: Two-generation reproduction toxicity study
Species: Rat

Application Route: Inhalation
Symptoms: No effects on fetal development.
Remarks: Based on test data

Reproductive toxicity – assessment No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

Specific target organ toxicity - single exposure Not classified based on available information.

Specific target organ toxicity - repeated exposure Not classified based on available information.

Decamethylcyclopentasiloxane:

Routes of exposure: Skin contact
Assessment: No significant health effects observed in animals at concentrations of 200 mg/kg bw or less.
Species: Rat
Application Route: Skin contact
Remarks: Based on test data

Routes of exposure: Ingestion
Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.
Species: Rat
Application Route: Ingestion
Remarks: Based on test data

Routes of exposure: inhalation (vapor)
Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less.
Species: Rat
Application Route: inhalation (vapor)
Remarks: Based on test data

Aspiration hazard Not classified based on available information.

12. Ecological information

Ecotoxicity

Toxicity to fish (Chronic toxicity) No toxicity at the limit of solubility

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) No toxicity at the limit of solubility

Ecotoxicology Assessment – Chronic aquatic toxicity This product has no known ecotoxicological effects.

Persistence and degradability

Decamethylcyclopentasiloxane:

Biodegradability
Result: Not readily biodegradable.
Biodegradation: 0.14 %
Exposure time: 28 d
Method: OECD Test Guideline 310

Bioaccumulative potential

Decamethylcyclopentasiloxane:

Bioaccumulation
Species: Pimephales promelas (fathead minnow)
Bioconcentration factor (BCF): >= 500
Remarks: Based on test data
Trophic magnification factor <1

Biomagnification factor <1
Does not biomagnify along the food chain.

Mobility in soil No data available.

Other adverse effects No data available

13. Disposal considerations

Disposal instructions Dispose in accordance with local and federal regulations.

Contaminated packaging Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations.

14. Transport information

International regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Domestic regulation

49 CFR

UN/ID/NA number	NA 1993
Proper shipping name	COMBUSTIBLE LIQUID, N.O.S
Class	A
Packing group	III
Labels	None
ERG code	128
Marine pollutant	No
Remarks	The above shipping regulations apply only to containers over 119 gallons or 450 liters. Not regulated if shipped in packages less than or equal to 119 gallons or 450 liters.

15. Regulatory information

US State regulations

California Proposition 65

This product contains chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop 65) as being known to cause cancer, birth defects or other reproductive harm.

Chemical name	CAS number	Warning
Ethylbenzene	100-41-4	cancer

16. Other information

Latest revision(s)

Date of revision 07.01.2015

Further information

NFPA

HMIS

0 = not significant, 1 = slight
2 = moderate, 3 = high
4 = extreme, * = chronic

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