

U.S. Department of Labor

Occupational Safety and Health Administration

Jacksonville Area Office
1851 Executive Center Drive
Suite 227
Jacksonville, FL 32207
Telephone: (904) 232-2895 Facsimile: (904) 232-1294
www.osha.gov



August 28, 2017

John S. Quaterman
P.O. Box 88
Hahira, GA 31632

RE: OSHA Complaint No. 1253249

Dear John S. Quaterman:

Sabal Trail Transmission, LLC has advised me that the hazards you complained about have been investigated. The employer states that, if a hazard was found to exist, the necessary steps have been taken to correct the hazardous condition. A copy of the employer's letter is enclosed.

With this information, OSHA believes the case can be closed on the grounds that the hazardous conditions have been corrected (or no longer exist). If you do not agree that the hazards you complained about have been satisfactorily abated, please contact us in writing by September 11, 2017. If we do not hear from you within that time, we will assume that the hazard has been corrected or eliminated, and we will take no further action with respect to this case.

Your action on behalf of safety and health in the workplace is sincerely appreciated.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian J. Sturtecky".

Brian J. Sturtecky
Area Director



SHIPPED AUG 24 2017

5400 Westheimer Court
Houston, Texas 77056

August 23, 2017

Occupational Safety and Health Administration
Jacksonville Area Office
1851 Executive Center Drive, Suite 227
Jacksonville, FL 32207

RE: Report Number: 1253249

Dear Mr. Sturtecky:

This letter is in response to your communication dated August 16, 2017 of alleged work place hazards at the Sabal Trail Transmission, LLC ("Sabal Trail") Dunnellon odorant facility located at 13779 SW State Road 200, Dunnellon FL, 34432. The specific nature of the allegations are as follows:

1. On or about July 16, 2017 a leak of methyl herceptin or mercaptan occurred at the Dunnellon Compressor Station site, responding employees were not issued personal protective equipment, exposing employees to hazardous materials.
2. On or about August 5, 2017 a leak a leak of methyl herceptin or mercaptan occurred at the Dunnellon Compressor Station site, responding employees were not issued personal protective equipment, exposing employees to hazardous materials.
3. On or about August 6, 2017 a leak a leak of methyl herceptin or mercaptan occurred at the Dunnellon Compressor Station site, responding employees were not issued personal protective equipment, exposing employees to hazardous materials

Facility Background:

The Sabal Trail pipeline is a new 515-mile interstate natural gas pipeline system crossing the states of Alabama, Georgia and Florida providing transportation services for power generation needs to Florida Power and Light ("FPL") and Duke Energy of Florida. Sabal Trail's Phase I facilities were placed into full commercial service on July 3, 2017.¹ Sabal Trail is a joint venture owned by Spectra Energy Partners (now owned by Enbridge Energy, Inc.), NextEra Energy, Inc., and Duke Energy.

The Dunnellon Compressor Station site is located on approximately 63.44 acres owned by Sabal Trail. The compressor station is part of Sabal Trail's Phase II and is planned to be constructed in 2019. The new Dunnellon odorant facility is located approximately 810 feet northwest from the State Road 200 entrance.

¹ The Sabal Trail Project underwent almost 3 years of comprehensive evaluation by federal and state agencies involving hundreds of comments by interested parties including project opponents. One of the more active project opponents was WWALS Watershed Coalition. This group and its members continue to contact federal and state agencies, including OSHA, to claim "violations" and object to the operation of the Sabal Trail pipeline system. See, <http://www.wwals.net/2017/08/15/sabal-trail-today-about-the-dunnellon-compressor-station-chronic-problem-nyuk-nyuk-nyuk-2017-08-15/#more-35993>

Investigation Details:

The allegations stated above have been thoroughly reviewed and an investigation was initiated to the response activities by Sabal Trail Transmission employees to the Dunnellon odorant facility. The following is the result of that investigation.

Response Details:

1. On July 16, 2017, at approx. 8:00 PM following a notification of an odorant smell, a Sabal Trail Transmission employee responded to the Dunnellon facility. The employee discovered a minor leak on a check valve inside the control cabinet on the mercaptan system. The employee isolated the system and switched to secondary pump. The primary system check valve was replaced and put back into service and switched back to the primary system.
2. On Aug 5th, 2017 at approx. 5:15 pm following a notification of an odorant smell, a Sabal Trail Transmission employee responded to the Dunnellon facility. The employee discovered a leak inside the control cabinet due to equipment failure. A check valve in the mercaptan injection system malfunctioned and released approx. 3 gallons of mercaptan inside the control cabinet and into the secondary containment. The odorant injection system was shut in and the spill kit on site was utilized to contain and remediate the release. The employee switched to the secondary pump and system was put back into service until primary system could be repaired.
3. On Aug 6th, 2017 at approx. 7:46 AM following a notification of an odorant smell, a Sabal Trail Transmission employee responded to the Dunnellon Facility. The employee discovered a minor mercaptan leak inside the control cabinet. The secondary check valve in the injection system malfunctioned and released approx. 1 cup of mercaptan inside the control cabinet. The odorant injection system was shut in and spill kit on site was utilized to contain and remediate the release. The odorant injection system was isolated and remains out of service.

Please know that Sabal Trail Transmission is in compliance with the requirement for the storing and handling of mercaptan to odorize natural gas in our pipeline system. The mercaptan utilized at the Dunnellon facility is Spotleak 1009 manufactured by Odor-Tech, LLC.

Including safety glasses and hard hat required at all facility sites, the responding employees did wear the appropriate Personal Protective Equipment when responding to the three events listed in the allegations and used the appropriate materials to safely make the repairs and remediate the site. Sabal Trail Transmission maintains spill kits at the Dunnellon location and contain the necessary equipment.

Dunnellon Spill Kit Contents:

- 1 Over-Pack Drum
- Tyvek Suits
- 1 Small charcoal de-odorize drum
- 3 sets of Gloves (plastic for chemical handling)
- Absorbent Pads and Booms
- 1 Eye Wash Bottle
- 1 pack of Duck Seal putty

- 2 rolls of Duct tape
- 2 Plastic Shovels
- O-Scent Odorant Neutralizer - 4 Gallons per site
- 2 Heavy Duty Tarps
- 1 bag of absorbent material

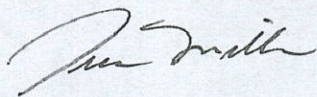
Design review of the odorant injection equipment is currently being conducted with the equipment vendor, Sabal Trail Operations and Engineering. A root cause analysis found a design flaw in line size and distance from odorant pumps to injection points on the pipeline. System modifications are being finalized and the odorant injection system will not be put back into service until modifications are complete and tested.

In response to the alleged hazards, you will find the following enclosed:

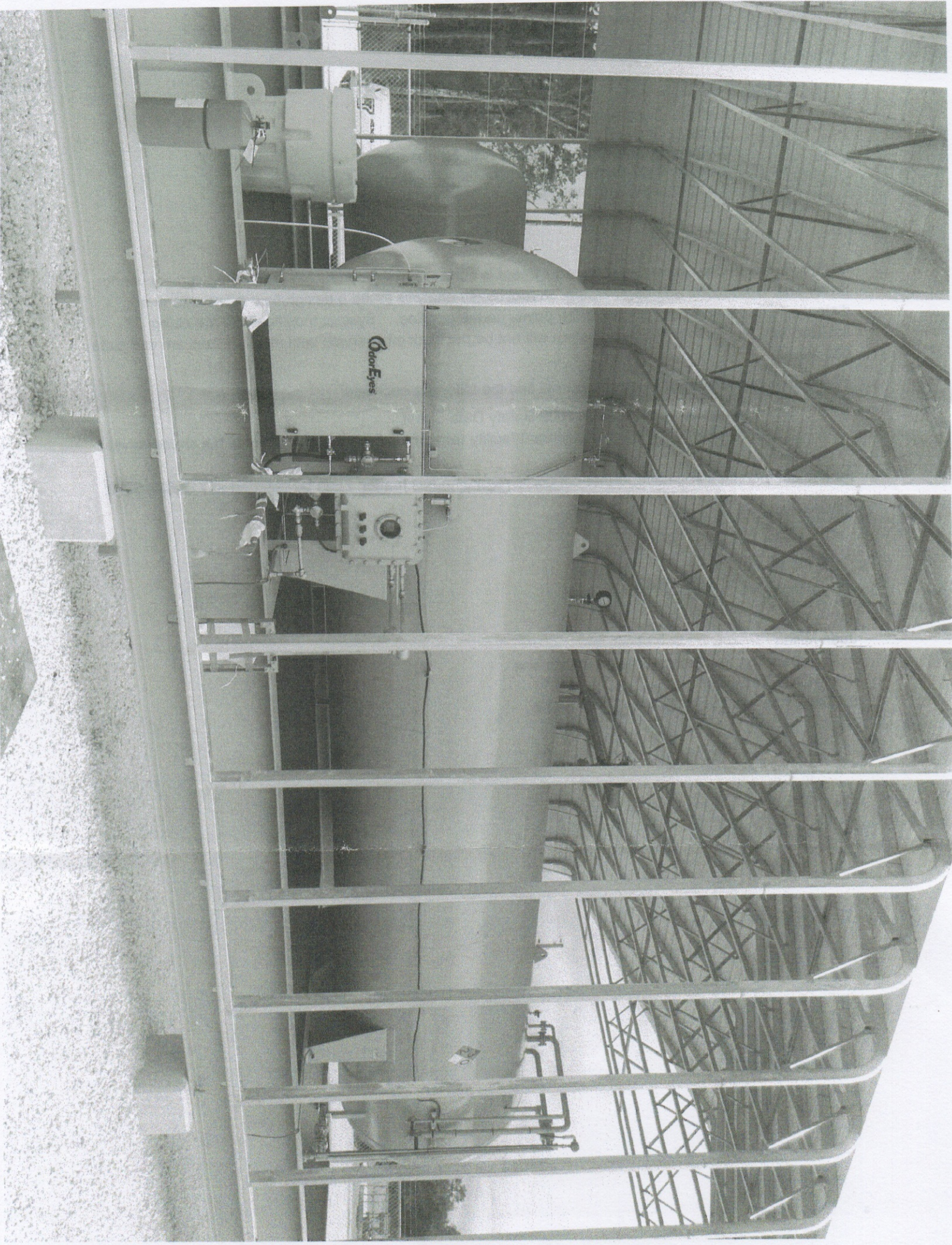
1. Odor-Tech, LLC Spotleak 1009 Safety Data Sheet
2. Pictures of the Dunnellon Odorant facility (one of the facility and another of the check valves)

Please contact me if you have further concerns regarding this matter. I can be reached at 713-627-5342.

Sincerely,



Juan Millan
EHS Supervisor, South East Region Operations.
ENBRIDGE ENERGY
5400 Westheimer Court, Houston, TX 77056



SPOTLEAK® 1009

1. PRODUCT AND COMPANY IDENTIFICATION

Company

Odor-Tech, LLC.
7591 Esler Field Road
Pineville, LA 71360

Thio and Fine Chemicals

Customer Service Telephone Number: (800) 628-4453
(Monday through Friday, 8:00 AM to 5:00 PM EST)

Emergency Information

Transportation: CHEMTREC: (800) 424-9300

(24 hrs., 7 days a week)

Medical: Rocky Mountain Poison Center: (866) 767-5089
(24 hrs., 7 days a week)

Product Information

Product name: SPOTLEAK® 1009
Synonyms: Not available
Molecular formula: Mixture
Chemical family: mercaptans
Molecular weight: 88.16 g/mol
Product use: Odour agents

2. HAZARDS IDENTIFICATION

Emergency Overview

Color: clear
Physical state: liquid
Odor: strong, stinging

*Classification of the substance or mixture:

Flammable liquid., Category 2, H225
Oral: Acute toxicity, Category 4, H302
Skin sensitisation, Category 1, H317
Acute aquatic toxicity, Category 1, H400
Chronic aquatic toxicity, Category 2, H411

*For the full text of the H-Statements mentioned in this Section, see Section 16.

GHS-Labeling

Hazard pictograms:



Signal word:

Danger

Hazard statements:

- H225 : Highly flammable liquid and vapour.
- H302 : Harmful if swallowed.
- H317 : May cause an allergic skin reaction.
- H400 : Very toxic to aquatic life.
- H411 : Toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements:

Objectionable odor may cause nausea, headache or dizziness. May displace oxygen and cause rapid suffocation.

Precautionary statements:

Prevention:

- 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/ equipment
- P242 : Use only non-sparking tools.
- P243 : Take precautionary measures against static discharge.
- P261 : Avoid breathing gas/mist/vapours/spray.
- P264 : Wash skin thoroughly after handling.
- P270 : Do not eat, drink or smoke when using this product.
- P272 : Contaminated work clothing should not be allowed out of the workplace.
- P273 : Avoid release to the environment.
- P280 : Wear protective gloves/ eye protection/ face protection.

Response:

- P301 + P312 : IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.
- P303 + P361 + P353 : IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P330 : Rinse mouth.
- P333 + P313 : If skin irritation or rash occurs: Get medical advice/ attention.
- P363 : Wash contaminated clothing before reuse
- P370 + P378 : In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- P391 : Collect spillage.

Storage:

- P403 + P235 : Store in a well-ventilated place. Keep cool.

Disposal:

- P501 : Dispose of contents/ container to an approved waste disposal plant

Supplemental information:

Potential Health Effects:

Objectionable odor may cause nausea, headache or dizziness. Vapor is heavier than air and can cause suffocation by reducing oxygen available for breathing.
May also cause: chest discomfort, accumulation of fluid in the lungs, (severity of effects depends on extent of exposure).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No.	Wt/Wt	GHS Classification**
2-Propanethiol, 2-methyl-	75-66-1	>= 70 - <= 80 %	H225, H317, H411

SPOTLEAK® 1009

2-Propanethiol	75-33-2	>= 10 - < 30 %	H225, H317, H400, H410
1-Propanethiol	107-03-9	>= 2 - < 5 %	H225, H302, H317, H400

**For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES**Inhalation:**

If inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin:

In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eyes:

Immediately flush eye(s) with plenty of water.

Ingestion:

If swallowed, DO NOT induce vomiting unless directed to do so by medical personnel. Get medical attention. Never give anything by mouth to an unconscious person. Rinse mouth.

5. FIREFIGHTING MEASURES**Extinguishing media (suitable):**

Carbon dioxide (CO₂), Foam, Dry chemical

Extinguishing media (unsuitable):

High volume water jet

Protective equipment:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand / NIOSH approved or equivalent).

Further firefighting advice:

Cool closed containers exposed to fire with water spray.

Do not use a solid water stream as it may scatter and spread fire.

Closed containers of this material may explode when subjected to heat from surrounding fire.

After a fire, wait until the material has cooled to room temperature before initiating clean-up activities.

Do not allow run-off from fire fighting to enter drains or water courses.

Fire fighting equipment should be thoroughly decontaminated after use.

Fire and explosion hazards:

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Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, and other flames and ignition sources at locations distant from material handling point.
Vapours may form explosive mixture with air.
When burned, the following hazardous products of combustion can occur:
Carbon oxides
sulfur oxides
hydrogen sulfide

6. ACCIDENTAL RELEASE MEASURES

In case of spill or leak:

Prevent further leakage or spillage if you can do so without risk. Evacuate area of all unnecessary personnel. Eliminate all ignition sources. Ventilate area only if odor control is not an issue. Cover spill area with closed-cell foam to reduce odors (use of Aqueous Film Forming Foam (AFFF) with polymeric layer is acceptable). If foam is unavailable, absorb spill with liquid-binding material (e.g. diatomaceous earth, saw dust universal binder) and deodorize residue on ground with 3-10% hydrogen peroxide. Wash with water and recover it. If spill is contained within a large containment area, add 5% bleach solution (sodium hypochlorite) in a 50 parts bleach solution to one part product dilution ratio. Swimming pool chemicals (hypochlorite compounds) work effectively in deodorizing product. If these are applied to product, the crystals must be accompanied by sufficient water of dilution so that the considerable heat of reaction will be absorbed. Enzyme or bacteria based deodorizers are also acceptable for use. Sweep or scoop up using non-sparking tools and place into suitable properly labeled containers for prompt disposal. Place waste materials into Department of Transportation (DOT)-approved drums for disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

7. HANDLING AND STORAGE

Handling

General information on handling:

Do not taste or swallow.
Avoid breathing vapor or mist.
Avoid prolonged or repeated contact with skin.
Keep away from heat, sparks and flames.
No smoking.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.
Check that all equipment is properly grounded and installed to satisfy electrical classification requirements.
Container hazardous when empty.
Emptied container retains vapor and product residue.
Follow label warnings even after container is emptied.
Do not enter confined spaces unless adequately ventilated.
RESIDUAL VAPORS MAY EXPLODE ON IGNITION.
DO NOT CUT, DRILL, GRIND, OR WELD ON OR NEAR THIS CONTAINER.
Improper disposal or reuse of this container may be dangerous and/or illegal.

Storage

General information on storage conditions:

Keep in a dry, cool place. Keep away from direct sunlight. Keep container closed when not in use. Store in closed

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containers, in a secure area to prevent container damage and subsequent spillage. Store in well ventilated area away from heat and sources of ignition such as flame, sparks and static electricity. Ensure that all storage and handling equipment is properly grounded and installed to satisfy electrical classification requirements. Static electricity may accumulate when transferring material. All metal and groundable storage containers, including but not limited to drums, cylinders, Returnable Intermodal Bulk Containers (RIBCs) and Class C Flexible Intermodal Bulk Containers (FIBCs) must be bonded and grounded during filling and emptying operations. Observe all federal, state and local regulations and National Fire Protection Association (NFPA) Codes which pertain to the specific local conditions of storage and use, including OSHA 29 CFR 1910.106 and NFPA 30, 70, 77, and 497.

Storage incompatibility – General:

Store separate from: Strong oxidizing agents

Acids (concentrated solutions)

Alkaline earth metals

Bases

Reducing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Airborne Exposure Guidelines:****Engineering controls:**

Investigate engineering techniques to reduce exposures below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Monitor carbon monoxide and oxygen levels in tanks and enclosed spaces. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

Respiratory protection:

Avoid breathing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. Consult respirator manufacturer to determine appropriate type equipment for a given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure or where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR § 1910.134.

Skin protection:

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for given application. Wear chemical goggles, a face shield, and chemical resistant clothing such as a rubber apron when splashing may occur. Rinse immediately if skin is contaminated. Remove contaminated clothing immediately and wash before reuse. Clean protective equipment before reuse. Provide a safety shower at any location where skin contact can occur. Wash thoroughly after handling.

Eye protection:

Where eye contact may be likely, wear chemical goggles and have eye flushing equipment available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Color:	clear
Physical state:	liquid
Odor:	strong, stinging
Odor threshold:	0.1 ppb
Flash point	< 0.01 °F (< -17.77 °C) (Tag closed cup)
Auto-ignition temperature:	473 °F (245 °C)
Lower flammable limit (LFL):	1.1 %(V)
Upper flammable limit (UFL):	12.1 %(V)
pH:	not determined
Density:	not determined
Specific Gravity (Relative density):	0.812 (59.9 °F (15.5 °C))
Bulk density:	not determined
Vapor pressure:	341 mmHg (32 °F (0 °C))
Relative vapor density:	3.04 (Air = 1.0)
Vapor density:	3 kg/m3
Boiling point/boiling range:	144 °F (62 °C)
Freezing point:	< -49.99 °F (< -45.55 °C)
Evaporation rate:	not determined
Solubility in water:	68 °F (20 °C) insoluble
Solubility in other solvents: [qualitative and quantative]	Soluble in: Alcohols Ethyl ether
Refractive index:	1.425

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Viscosity, dynamic:	0.57 mPa.s 68 °F (20 °C)
% Volatiles:	100 %
Molecular weight:	88.16 g/mol
Oil/water partition coefficient:	No data available
Thermal decomposition	No data available
Critical point:	Critical pressure: 41853 mmHg Critical temperature: 583 °F (306 °C)
Flammability:	See GHS Classification in Section 2

10. STABILITY AND REACTIVITY

Stability:

This material is chemically stable under normal and anticipated storage, handling and processing conditions.

Materials to avoid:

- Reacts violently with :
Strong oxidizing agents
Acids
Bases
Reducing agents
Alkaline earth metals

Conditions / hazards to avoid:

Keep away from heat and sources of ignition. To avoid thermal decomposition, do not overheat.

Hazardous decomposition products:

Thermal decomposition giving flammable and toxic products
Carbon oxides
sulfur oxides
hydrogen sulfide

11. TOXICOLOGICAL INFORMATION

Data on this material and/or its components are summarized below.

Data for SPOTLEAK® 1009

Acute toxicity

Oral:

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Acute toxicity estimate 1,928 mg/kg

Inhalation:

No deaths occurred (rat) 4 h LC₀ = 5.3 mg/l. (vapor)

Skin Irritation:

Not corrosive. (rabbit)

Eye Irritation:

Causes mild eye irritation. (rabbit)

Data for 2-Propanethiol, 2-methyl- (75-66-1)**Acute toxicity****Dermal:**

No deaths occurred. (Rabbit) LD₀ > 2,000 mg/kg.

Skin Sensitization:

May cause an allergic skin reaction. Buehler method. (Guinea pig) Skin allergy was observed.

May cause allergic skin reaction. LLNA: Local Lymph Node Assay. (Mouse) Produced an allergic reaction.

Repeated dose toxicity

Subchronic inhalation administration to Rat / affected organ(s): kidney / signs: inflammation, degeneration, increased organ weight / (not considered relevant to humans)

Repeated oral administration to Rat / affected organ(s): kidney / signs: hyaline droplet nephropathy / (not considered relevant to humans)

Genotoxicity**Assessment in Vitro:**

No genetic changes were observed in laboratory tests using: bacteria, animal cells

Genotoxicity**Assessment in Vivo:**

No genetic changes were observed in laboratory tests using: mice

Developmental toxicity

Exposure during pregnancy. inhalation (rat and mouse) / No birth defects were observed.

Reproductive/Developmental Effects Screening Assay. oral (Rat) / No birth defects were observed.

Reproductive effects

Reproductive/Developmental Effects Screening Assay. oral (Rat) / No toxicity to reproduction.

Other information

Due to the viscosity, this substance may present an aspiration hazard.

Symptoms of aspiration may include increased breathing and heart rate, coughing and related signs of respiratory distress.

Data for 2-Propanethiol (75-33-2)

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Acute toxicity

Dermal:

No deaths occurred. (Rabbit) LD₅₀ > 2,000 mg/kg.

Skin Sensitization:

Sensitizing. LLNA: Local Lymph Node Assay. (Mouse) Produced an allergic reaction.

Genotoxicity

Assessment in Vitro:

No genetic changes were observed in laboratory tests using: animal cells, bacteria, (data for a similar material)

Genotoxicity

Assessment in Vivo:

No genetic changes were observed in laboratory tests using: mice, (data for similar material)

Developmental toxicity

Exposure during pregnancy. inhalation (rat and mouse) / No birth defects were observed. (data for a similar material)

Reproductive effects

Reproductive/Developmental Effects Screening Assay. oral (Rat) / No toxicity to reproduction / (data for a similar material)

Other information

Due to the viscosity, this substance may present an aspiration hazard.

Symptoms of aspiration may include increased breathing and heart rate, coughing and related signs of respiratory distress.

Human experience

Inhalation:

Systemic effects: headache, nausea, unconsciousness, cyanosis, breathing difficulties, rapid heart beat. (vapor) (repeated or prolonged exposure)

Data for 1-Propanethiol (107-03-9)

Acute toxicity

Dermal:

May be harmful in contact with skin. (Rabbit) LD₅₀ > 2,000 mg/kg.

Skin Sensitization:

May cause allergic skin reaction. LLNA: Local Lymph Node Assay. (Mouse) Produced an allergic reaction. (data for a similar material)

Other information

Due to the viscosity, this substance may present an aspiration hazard.

Symptoms of aspiration may include increased breathing and heart rate, coughing and related signs of respiratory distress.

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Human experience**Inhalation:**

Objectionable odor may cause nausea, headache or dizziness.

Human experience**Eye contact:**

Eye: Irritating. (vapor)

12. ECOLOGICAL INFORMATION**Chemical Fate and Pathway**

Data on this material and/or its components are summarized below.

Data for 2-Propanethiol, 2-methyl- (75-66-1)**Biodegradation:**

Not readily biodegradable. (63 d) biodegradation 6 %

Data for 2-Propanethiol (75-33-2)**Biodegradation:**

Not readily biodegradable. (28 d) biodegradation 0 %

Data for 1-Propanethiol (107-03-9)**Biodegradation:**

Readily biodegradable. (14 d) biodegradation 94 %

Octanol Water Partition Coefficient:

log Pow = 1.81 (measured)

Ecotoxicology

Data on this material and/or its components are summarized below.

Data for 2-Propanethiol, 2-methyl- (75-66-1)**Aquatic toxicity data:**

Harmful. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 34 mg/l

Aquatic invertebrates:

Toxic. Daphnia magna (Water flea) 48 h EC50 = 6.7 mg/l

Algae:

Harmful. Pseudokirchneriella subcapitata (green algae) 72 h EC50 = 24 mg/l

Data for 2-Propanethiol (75-33-2)**Aquatic toxicity data:**

Harmful. Oncorhynchus mykiss (rainbow trout) 96 h LC50 = 34 mg/l (data for a similar material)

Aquatic invertebrates:

Very toxic. Daphnia magna (Water flea) 48 h EC50 0.25 - 0.5 mg/l

Algae:

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Harmful. *Pseudokirchneriella subcapitata* (green algae) 72 h ErC50 = 21.9 mg/l (data for a similar material)

Microorganisms:

Practically nontoxic Respiration inhibition / Activated sludge 3 h EC50 = 880.5 mg/l

Data for 1-Propanethiol (107-03-9)

Aquatic toxicity data:

Toxic. *Pimephales promelas* (fathead minnow) 96 h LC50 = 1.3 mg/l

Aquatic invertebrates:

Very toxic. *Daphnia magna* (Water flea) 48 h EC50 = 0.07 mg/l

13. DISPOSAL CONSIDERATIONS

Waste disposal:

Disposal via incineration is recommended. Dispose of in accordance with federal, state and local regulations. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits. Note: Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

Take appropriate measures to prevent release to the environment.

14. TRANSPORT INFORMATION

US Department of Transportation (DOT)

UN Number	:	3336
Proper shipping name	:	Mercaptan mixture, liquid, flammable, n.o.s.
Technical name	:	(tert-Butylmercaptan, Isopropyl mercaptan)
Class	:	3
Packaging group	:	II
Marine pollutant	:	yes

International Maritime Dangerous Goods Code (IMDG)

UN Number	:	3336
Proper shipping name	:	MERCAPTANS, LIQUID, FLAMMABLE, N.O.S.
Technical name	:	(t-Butylmercaptan, PROPANETHIOLS)
Class	:	3
Packaging group	:	II
Marine pollutant	:	yes
Flash point	:	< 0.01 °F (< -17.77 °C) Tag closed cup

15. REGULATORY INFORMATION

Chemical Inventory Status

EU. EINECS	EINECS	Conforms to
United States TSCA Inventory	TSCA	The components of this product are all on the TSCA Inventory.
Canadian Domestic Substances List (DSL)	DSL	All components of this product are on the Canadian DSL.
China. Inventory of Existing Chemical Substances in China (IECSC)	IECSC (CN)	Conforms to
Japan. ENCS - Existing and New Chemical Substances Inventory	ENCS (JP)	Conforms to
Japan. ISHL - Inventory of Chemical Substances	ISHL (JP)	Conforms to
Korea. Korean Existing Chemicals Inventory (KECI)	KECI (KR)	Conforms to
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	PICCS (PH)	Conforms to
Australia Inventory of Chemical Substances (AICS)	AICS	Conforms to

United States – Federal Regulations

SARA Title III – Section 302 Extremely Hazardous Chemicals:

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

SARA Title III - Section 311/312 Hazard Categories:

Acute Health Hazard, Fire Hazard

SARA Title III – Section 313 Toxic Chemicals:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - Reportable Quantity (RQ):

<u>Chemical Name</u>	<u>CAS-No.</u>	<u>Reportable quantity</u>
2-Propanethiol, 2-methyl-	75-66-1	100 lbs
Benzene	71-43-2	10 lbs

United States – State Regulations

SPOTLEAK® 1009

New Jersey Right to Know

<u>Chemical Name</u>	<u>CAS-No.</u>
2-Propanethiol, 2-methyl-	75-66-1
2-Propanethiol	75-33-2
1-Propanethiol	107-03-9

New Jersey Right to Know – Special Health Hazard Substance(s)

<u>Chemical Name</u>	<u>CAS-No.</u>
2-Propanethiol, 2-methyl-	75-66-1
2-Propanethiol	75-33-2
1-Propanethiol	107-03-9

Pennsylvania Right to Know

<u>Chemical Name</u>	<u>CAS-No.</u>
2-Propanethiol, 2-methyl-	75-66-1
2-Propanethiol	75-33-2
1-Propanethiol	107-03-9
Benzene	71-43-2

Pennsylvania Right to Know – Environmentally Hazardous Substance(s)

<u>Chemical Name</u>	<u>CAS-No.</u>
Benzene	71-43-2

Pennsylvania Right to Know – Special Hazardous Substance(s)

<u>Chemical Name</u>	<u>CAS-No.</u>
Benzene	71-43-2

California Prop. 65

WARNING! This product contains a chemical known to the State of California to cause cancer.

<u>Chemical Name</u>	<u>CAS-No.</u>
Benzene	71-43-2

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<u>Chemical Name</u>	<u>CAS-No.</u>
Benzene	71-43-2

16. OTHER INFORMATION

SPOTLEAK® 1009

Full text of H-Statements referred to under sections 2 and 3.

H225 Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Miscellaneous:

Other information: Refer to National Fire Protection Association (NFPA) Codes 30, 70, 77, and 497 and OSHA 29 CFR 1910.106, for safe handling.

Latest Revision(s):

Reference number: 000000035653
Date of Revision: 05/15/2015
Date Printed: 05/15/2015

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