



# SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

**PENETONE® 19**

Page: 1 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

## SECTION 1: IDENTIFICATION

**Product name:** PENETONE 19

**Recommended use:** Gas turbine compressor cleaning

**Physical Description:** Clear amber liquid with mild solvent odor

**Generic Ingredients:** Water, surfactants and soap, aromatic hydrocarbons and other solvents

**Manufacturer:**

Penetone Corporation  
700 Gotham Parkway  
Carlstadt, NJ 07072  
800-631-1652 or 201-567-3000

**Business Contact:**

Customer Service  
800-631-1652 x2602 or 2272  
Product Safety  
800-631-1652 x2211 or 2257

**Emergency Phone Numbers:** PENETONE 201-567-3000 CHEMTREC 800-424-9300

## SECTION 2: HAZARDS IDENTIFICATION

### GHS CLASSIFICATION:

<p><b>Health:</b> Skin irritation: 2 Eye irritation: 2A Carcinogenicity: 2</p>	<p>Specific target organ toxicity - single exposure: 3 Aspiration hazard: 1 <b>Physical:</b> Flammable liquid: 4</p>
--	--

### DANGER!

May Be Fatal If Swallowed and Enters Airways.  
Causes Skin and Serious Eye Irritation.  
Suspected of Causing Cancer.  
May Cause Drowsiness or Dizziness.  
Combustible Liquid.



<b>Precautionary Statements:</b>	
<p><u>Prevention:</u> Obtain special instruction before use. Do not handle until all safety precautions have been read and understood. Avoid breathing fumes, vapors or mists if inhalable mists occur during use. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and face protection. Wash hands and exposed skin thoroughly after handling. Keep away from flames and hot surfaces.–No smoking.</p> <p><u>Response:</u> <i>If in eyes:</i> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. <i>If on skin (or hair):</i> Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.</p>	<p><i>If inhaled:</i> Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, emergency room or 911 if you feel unwell. <i>If swallowed,</i> immediately call a poison center, doctor, emergency room, or 911. Do NOT induce vomiting. <i>In case of fire:</i> Use dry chemical, carbon dioxide, water spray, water fog, or foam. Do not use solid water stream as this may spread the fire. <i>If exposed or concerned:</i> Get medical advice/attention.</p> <p><u>Storage:</u> Store locked up. Store in a well-ventilated place. Keep container tightly closed.</p> <p><u>Disposal:</u> Dispose of contents/container in accordance with local, regional, and national regulations (see Sections 13 and 15 of SDS for disposal and reporting requirements).</p>



## SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

### PENETONE® 19

Page: 2 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Concentration Wt% (1)
Water	7732-18-5	25-50
Ethoxylated nonylphenol	127087-87-0	10-25
Aromatic petroleum naphtha	64742-94-5	10-25
Hexylene glycol	107-41-5	10-25
Diethanolamine	111-42-2	1-10
Diethanolamine soap	68002-82-4	1-10

(1) Exact percentages being withheld under trade secret provision of OSHA HCS 1910.1200(i)

### SECTION 4: FIRST-AID MEASURES

#### General Description of Symptoms & First-Aid Measures

Most likely work-place exposure routes will be *skin contact* or *inhalation*.

For *skin contact*, typically no immediate effects will be observed. Slight reddening or minor irritation could develop some time after exposure if product is not quickly washed off. For sensitive individuals, a rash may appear.

*Inhalation* exposure may produce varied effects, particularly if exposure occurs above the recommended workplace exposure limits (see SECTION 8). Typical symptoms would include headaches, dizziness, and drowsiness. In extreme cases, unconsciousness and other central nervous effects may occur.

#### Eyes

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists or develops: Get medical advice or attention. Penetone recommends that after any eye exposure a physician be seen immediately.

#### Ingestion

If swallowed: Immediately call a poison center, doctor, physician or other competent medical authority. Rinse mouth. Product presents an aspiration hazard. DO NOT INDUCE VOMITING.

#### Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center, doctor, physician or other competent medical authority if you feel unwell.

#### Skin

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. A mild soap may be used to wash skin. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice or attention.

#### Special Treatment / Other

None

### SECTION 5: FIRE FIGHTING MEASURES

#### Flammable Properties

Classification: 4

Flash Point: 155°F PMCC

Autoignition Temperature: not determined

Lower Flammable Limit: not determined Upper Flammable Limit: not determined

#### Specific Hazards

Combustible liquid. Can form combustible mixtures at or above the flash point. Although the product is combustible,



## SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

---

### PENETONE® 19

Page: 3 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

---

it is water based and water dilutable and will self extinguish with addition of water.

#### Extinguishing Media

**Suitable:** SMALL FIRE: Use dry chemical, carbon dioxide (CO<sub>2</sub>), water spray or regular foam. LARGE FIRE: water spray, water fog, or foam.

**Unsuitable:** Do not use solid water stream as this may spread fire.

#### Protection & Precautions for Firefighters

**Protective Equipment & Clothing:** Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters protective clothing will only provide limited protection.

**Fire Fighting Guidance:** Cool containers with flooding quantities of water until well after fire is out. Move containers from fire area if you can do it safely. Dike fire control water for later disposal; do not scatter material. Containers can expand and explode under fire conditions due to vapor buildup. Always stay away from containers engulfed in fire.

**Hazardous Combustion Products:** Smoke, fumes, and oxides of carbon and nitrogen.

---

## SECTION 6: ACCIDENTAL RELEASE MEASURES

---

#### **Land Spill**

Eliminate sources of ignition. Do not touch or walk through spilled material. Stop leak if you can do it safely. For large spills, dike and pump into properly labeled containers for reclamation or disposal. For small spill, soak up with absorbent material and place in properly labeled containers for disposal.

#### **Water Spill**

Product forms emulsion with water which may make cleanup difficult. Avoid agitation to minimize emulsion formation. Remove product from water surface by skimming or with suitable absorbents. Put into properly labeled containers for reclamation or disposal. If allowed by local environmental regulatory agencies, you may use a suitable dispersant. Check with local environmental regulatory agencies for reporting requirements.

**See SECTION 8 for EXPOSURE CONTROLS and PERSONAL PROTECTION.**

---

## SECTION 7: HANDLING & STORAGE

---

#### **Handling**

Do not handle near heat, sparks, or flame. Avoid contact with oxidizing agents. Use only with adequate ventilation/personal protection (SEE section 8). Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Avoid personal contact with any residue. Dispose of empty containers with care. Empty containers can contain flammable residue and explosive vapors. **Do not cut, weld, or reuse empty container.**

#### **Storage**

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Do not store near heat, sparks, open flame, or other ignition sources. Do not store near strong oxidizing agents. Do not store in direct sunlight. Avoid storing above 120°F (49°C).

---

## SECTION 8: EXPOSURE CONTROLS and PERSONAL PROTECTION

---

#### **Engineering Controls**

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.



# SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

## PENETONE® 19

Page: 4 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

### Personal Protection

**Inhalation** A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. Use of an organic vapor mask or respirator is recommended.

**Skin** Wear chemical resistant gloves such as: rubber, nitrile, neoprene, or latex when skin contact is possible. Protective clothing including gloves, apron, sleeves, boots, head and face protection should be worn depending on how the product is used. PPE should be cleaned thoroughly after each use.

**Eyes** Penetone recommends always wearing safety glasses as a minimum in any workplace. Conditions may warrant the use of chemical goggles and possibly a face shield. Consult your standard operating procedure or safety professional for advice. Use protective eye and face devices that comply with ANSI Z87.1-1987.

### Additional Remarks

Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use.

### Occupational Exposure Limits

Component Name	Source	Value	Type	Notation
Aromatic petroleum naphtha	ACGIH	100 mg/m <sup>3</sup>	TWA	Appendix H
	NIOSH	350 mg/m <sup>3</sup>	TWA	
		1800 mg/m <sup>3</sup>	Ceiling	
Diethanolamine	OSHA Z1	500 ppm	TWA	skin; A3
	ACGIH	1 mg/m <sup>3</sup> (IFV)	TWA	
	NIOSH	3 ppm	TWA	

## SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

**Appearance:** clear amber liquid  
**Odor:** mild solvent  
**Odor Threshold:** not determined  
**pH:** about 10  
**Melting Point / Freezing:** about 30°F  
**Boiling Point / Boiling Point Range:** about 212°F  
**Flash Point:** 155°F PMCC  
**Evaporation Rate:** equal to water  
**Flammability:** not applicable  
**Lower Flammable Limit:** not determined  
**Upper Flammable Limit:** not determined  
**Explosive Properties:** not applicable  
**Vapor Pressure:** equal to water  
**Relative Vapor Density:** not determined  
**Relative Density:** 0.99  
**Solubility (Water):** forms emulsion (separate in one to 12 hours)  
**Partition Coefficient (K<sub>ow</sub>):** not determined  
**Auto-ignition temperature:** not determined  
**Decomposition temperature:** not determined  
**Viscosity:** 10-50 centipoise at room temperature



## SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

---

### PENETONE® 19

Page: 5 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

---

---

## SECTION 10: STABILITY & REACTIVITY

---

### Reactivity

Product is stable and only reactive under extreme conditions (very high heat/pressure) or in the presence of specific incompatible materials (see below).

### Chemical Stability

Product is stable.

### Hazardous Reactions

Hazardous polymerization will not occur.

### Conditions to Avoid

Combustible liquid. Do not store near sources of heat, sparks, open flame, or other ignition sources.

### Incompatible Materials

Strong oxidizing agents.

### Hazardous Decomposition Products

Carbon monoxide and dioxide and nitrogen oxides when taken to dryness and burned.

---

## SECTION 11: TOXICOLOGICAL INFORMATION

---

### Product Summary

Product is irritating to the skin and eyes. Vapor/aerosol concentrations above recommended exposure levels are irritating to the eyes and respiratory tract, and may cause headaches, dizziness, drowsiness, unconsciousness and other central nervous system effects.

### Acute Toxicity:

**Dermal:** Rabbits, LD50 > 4,000 mg/kg (estimated using additivity formula)

**Inhalation:** no data available

**Oral:** Rats, LD50 > 2,000 mg/kg (estimated using additivity formula)

### Skin Corrosion/Irritation

Product when tested as a whole was only mildly irritating.

### Serious Eye Damage/Irritation

Based upon component data, product as a whole may cause moderate to serious eye irritation.

### Sensitization - Respiratory or Skin

Based upon component data, not expected to be a skin sensitizer.

### Germ Cell Mutagenicity

No data available

### Carcinogenicity

Diethanolamine is listed by IARC as Group 2B: possibly carcinogenic to humans and by ACGIH as Group 3A: confirmed animal carcinogen with unknown relevance to humans.

Diethanolamine in the presence of nitrites can form suspected cancer causing nitrosamines.

### Reproductive Toxicity

No data available.

The nonionic surfactant used in this product has produced effects in the fetus only at levels that were toxic to the



## SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

---

### PENETONE® 19

Page: 6 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

---

parent animals.

Diethanolamine has been found to be toxic to the fetus at doses toxic to the mother animal. Effects have been reported on male reproductive organs.

Hexylene glycol delayed development of the fetus at doses that were toxic to the mother animal.

#### Specific Target Organ Effects - Single Exposure

No data available.

#### Specific Target Organ Effects - Repeated or Prolonged Exposure

No data available.

Repeated exposure in lab animals to diethanolamine includes anemia (rats) and effects on the kidney (rats & mice) and liver (mice). Heart and nervous system effects were also observed in animals given exaggerated doses of diethanolamine.

The aromatic hydrocarbon caused kidney effects in male rats which are not considered relevant to humans.

Hexylene glycol produced effects on the kidney, liver, stomach, and irritation of gastric mucosa in rats. However no significant impairment of function was observed.

#### Aspiration Hazard

Based upon available data and comparison to similar materials, if swallowed, may pose a lung aspiration hazard during vomiting. Lung aspiration may result in chemical pneumonitis, pulmonary edema, and damage to lung tissue or death.

---

## SECTION 12: ECOLOGICAL INFORMATION

---

#### Product Summary

Product is expected to be toxic to fish, aquatic invertebrates, algae, and microorganisms. (Acute aquatic toxicity category 2 by European Union classification).

#### Ecotoxicity

LC/EC/IC 1-10 mg/l (estimated using additivity formula)

#### Persistence and Degradability

Based upon component data, product is expected to be inherently biodegradable.

#### Bioaccumulative Potential

No data available for the product. Aromatic solvent used in this product has the potential to bioaccumulate.

#### Mobility in soil

No data available for the product. Product is a complex mixture. Components will partition into water and soil phases depending on inherent solubility of component in water.

#### Other Adverse Effects

None known

---

## SECTION 13: DISPOSAL CONSIDERATIONS

---

Nonhazardous waste. Dispose of contents/container in accordance with all applicable federal, state, and local regulations.

**Note:** Contaminated product, soil, water, container residues and spill cleanup materials may be hazardous wastes. Appropriate hazardous waste designation is the responsibility of the user.



# SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

## PENETONE® 19

Page: 7 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

### SECTION 14: TRANSPORT INFORMATION

ID No.: none  
Proper Shipping Name: nonhazardous (nonregulated) material  
Hazard Class: none  
Packing Group: none  
Label: none  
Marine Pollutant: No  
RQ: Yes  
Special Precautions: None

### SECTION 15: REGULATORY INFORMATION

**TSCA**  
The ingredients in this product are listed on the TSCA inventory.

**RCRA HAZARD CLASS**  
Nonhazardous waste

**SARA 311/312 REPORTABLE HAZARD CATEGORIES:** Immediate (Acute) Health

**REPORTING REQUIREMENTS** (all quantities in pounds)

Component	CAS / 313 Code	Section 302 (EHS) TPQ	Section 304 EHS RQ	CERCLA RQ (1)	Section 313	CAA 112(r) TQ	CWA / OPA
Diethanolamine	111-42-2			100	313		
Product RQ for component				2,500 300 gal			
Hexylene glycol	N230			(2)	313		
(1) Releases exceeding the RQ just be reported to the National Response Center, 800-424-8802 and may be subject to state and local reporting. (2) CERCLA hazardous substance with no assigned RQ							

**NEW JERSEY RIGHT-TO-KNOW INFORMATION**  
This product contains water (CAS# 7732-18-5), ethoxylated nonylphenol (CAS 127087-87-0), aromatic petroleum naphtha (CAS 64742-94-5), hexylene glycol (CAS 107-41-5), and diethanolamine (CAS 111-42-2).

**CALIFORNIA PROPOSITION 65 INFORMATION**  
This product contains a chemical recognized by the state of California to cause cancer: diethanolamine (CAS# 111-42-2)

**SCAQMD INFORMATION**  
Is there a photochemically reactive material present? Yes  
What is the % by volume of photochemically reactive material? 15-20  
What is the VOC content? 280 g/l  
What is the vapor pressure of VOC's? 0.03 mm Hg @ 20°C



# SAFETY DATA SHEET

Penetone® Corporation, 700 Gotham Parkway, Carlstadt, NJ 07072  
CAGE 56883

**PENETONE® 19**

Page: 8 of 8  
Date Prepared: April 15, 2015  
MSDS No.: 1862

## SECTION 16: OTHER INFORMATION

### REVISION SUMMARY

New GHS format

### SUPERSEDES ISSUE DATE

September 20, 2011

### HAZARD RATING SYSTEMS:

	<u>HMIS</u>	<u>NFPA</u>
HEALTH	1	1
FLAMMABILITY	2	2
REACTIVITY	0	0
	B	

KEY  
4 = Severe  
3 = Serious  
2 = Moderate  
1 = Slight  
0 = Minimal

FOR ADDITIONAL PRODUCT INFORMATION, CONTACT YOUR SALES ENGINEER  
FOR ADDITIONAL HEALTH/SAFETY INFORMATION, CALL 201-567-3000

THE INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND ACCURATE TO THE BEST OF PENETONE'S KNOWLEDGE. THE INFORMATION RELATES TO THIS SPECIFIC MATERIAL. IT MAY NOT BE VALID FOR THIS MATERIAL IF USED IN COMBINATION WITH ANY OTHER MATERIALS OR IN ANY PROCESS. IT IS THE USER'S RESPONSIBILITY TO SATISFY ONESELF AS TO THE SUITABILITY AND COMPLETENESS OF THIS INFORMATION FOR HIS OWN PARTICULAR USE.