



PENETONE® 1112A

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 Date Prepared: March 15, 2015
 MSDS No.: 4345

SECTION 1: IDENTIFICATION

Product name: PENETONE 1112A

Recommended use: Carbon remover

Physical Description: Clear water white liquid with glycol ether odor

Generic Ingredients: Water, glycol ethers, alkanolamine, surfactant

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>Health: Skin corrosion: 1C Eye damage: 1</p>	<p>Physical: not classified</p>
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DANGER!

Causes Severe Skin Burns and Eye Damage.



<p>Precautionary Statements:</p>	
<p><u>Prevention:</u> Do not breathe mists if inhalable mists occur during use. Wear protective gloves, clothing, eye protection, and face protection. Wash hands and exposed skin thoroughly after handling.</p> <p><u>Response:</u> <i>If swallowed:</i> Rinse mouth. Do NOT induce vomiting. <i>If on skin or hair:</i> Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. <i>If in eyes:</i> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p>	<p><i>If inhaled:</i> Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center, doctor, emergency room, or 911.</p> <p><u>Storage:</u> Store locked up.</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>

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Concentration Wt% (1)
Water	7732-18-5	75-90
Ethanolamine	141-43-5	10-25
1-Butoxyethanol	111-76-2	1-10
Diethylene glycol methyl ether	111-77-3	1-10
Ethoxylated nonylphenol	127087-87-0	1-10
Diethylene glycol butyl ether	112-34-5	1-10

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



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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. A tingling or burning sensation might be felt some time after exposure. Slight reddening or minor irritation could also develop if product is not quickly washed off. If product not washed off or left in contact with skin for some time, skin burn could result.

Inhalation exposure may produce varied effects, particularly if exposure occurs above the recommended workplace exposure limits (see SECTION 8). Typical symptoms could include coughing, sneezing, and a tingling or burning sensation in the nose, throat, and lungs.

Eyes

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a local Poison Control Center, doctor, physician or other competent medical authority for medical advice. Penetone recommends that after any eye exposure a physician be seen immediately.

Ingestion

If swallowed: Rinse mouth. **DO NOT INDUCE VOMITING.** Immediately call a poison center, doctor, physician or other competent medical authority for medical advice.

Inhalation

If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a local Poison Control Center, physician, or other competent medical authority for medical advice.

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. Immediately call a local Poison Control Center, doctor, physician or other competent medical authority for medical advice.

Special Treatment / Other

None

SECTION 5: FIRE FIGHTING MEASURES

Flammable Properties

Classification: Non-flammable

Flash Point: None-to-boil

Autoignition Temperature: not determined

Lower Flammable Limit: Not applicable **Upper Flammable Limit:** Not applicable

Specific Hazards

Product is water based and water dilutable and presents no unusual fire hazards.

Extinguishing Media

Use extinguishing agents appropriate for controlling surrounding fire.

Unsuitable: None.

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.



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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 when taken to dryness.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Land Spill

Absorb spillage to prevent material damage. 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. Neutralize residue with dilute acid and follow with a liberal covering of sodium bicarbonate or other acceptable drying agent.

Water Spill

This is a water based product and will completely mix/dissolve in water making recovery difficult. This product is alkaline and may raise the pH of surface waters with low buffering capacity. Check with local environmental regulatory agencies for reporting requirements.

See SECTION 8 for EXPOSURE CONTROLS and PERSONAL PROTECTION.

SECTION 7: HANDLING & STORAGE

Handling

Avoid contact with eyes, skin and clothing. After handling, always wash hands thoroughly with soap and water. Avoid personal contact with any residue. Do not cut, weld, or reuse empty container.

Storage

Store locked up. Keep container tightly closed when not in use. Do not store near strong acids or strong oxidizers. 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.

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.



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Occupational Exposure Limits

<u>Component Name</u>	<u>Source</u>	<u>Value</u>	<u>Type</u>	<u>Notation</u>
Monoethanolamine	ACGIH	3 ppm	TWA	
		6 ppm	STEL	
	NIOSH	3 ppm	TWA	
		6 ppm	STEL	
	OSHA	3 ppm	TWA	
		6 ppm	STEL	
1-Butoxyethanol	ACGIH	20 ppm	TWA	A3; BEI
	NIOSH	5 ppm	TWA	skin
	OSHA	50 ppm	TWA	skin

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: clear water white liquid
Odor: glycol ether
Odor Threshold: not determined
pH: 12-12.5
Melting Point / Freezing: about 25°F
Boiling Point / Boiling Point Range: about 212°F
Flash Point: none to boiling point
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: equal to water
Relative Density: 0.99
Solubility (Water): soluble in water
Partition Coefficient (K_{ow}): not determined
Auto-ignition temperature: not determined
Decomposition temperature: not determined
Viscosity: less than 5 centipoise at room temperature

SECTION 10: STABILITY & REACTIVITY

Reactivity

Product will react with acids, giving off heat and possible splattering.

Chemical Stability

Stable.

Hazardous Reactions

Mixing with acids will give off heat and may cause splattering. Hazardous polymerization will not occur.

Conditions to Avoid

Alkaline liquid. Do not store near strong bases. Do not store near strong oxidizers.

Incompatible Materials

Strong acids, strong oxidizers.



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Hazardous Decomposition Products

Oxides of carbon and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Product Summary

Product is corrosive to skin, eyes, and other tissues, including oral and gastrointestinal. Mists can be corrosive to the eyes and respiratory tract. Ingestion may result in severe damage to the mouth, tongue, throat, and esophagus. Vapor concentrations above recommended exposure levels may cause headaches, dizziness, drowsiness, unconsciousness and other central nervous system effects.

Acute Toxicity:

Dermal: LD50 > 5,000 g/kg rabbit (estimated using additivity formula)

Inhalation: No data available

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

Skin Corrosion/Irritation

Short term exposure may be irritating. Longer term exposure may cause severe irritation or possibly burns. Prolonged or repeat skin exposures can result in dermatitis.

Serious Eye Damage/Irritation

Short term exposure may be irritating. Longer term exposure can cause serious eye damage which can result in severe irritation, pain and burns, and permanent damage including blindness.

Sensitization - Respiratory or Skin

Based upon components, product is not expected to be a respiratory or skin sensitizer.

Germ Cell Mutagenicity

Based upon components, product is not expected to result in germ cell mutagenicity.

Carcinogenicity

Ethylene glycol monobutyl ether is listed by ACGIH as Group A3: confirmed animal carcinogen with unknown relevance to humans.

Reproductive Toxicity

No data available.

Monoethanolamine and the nonionic surfactants used in this product have produced effects in the fetus only at levels that were toxic to the parent animals.

Ethylene glycol monobutyl ether has been toxic to the fetus lab animals at doses toxic to the mother. Effects on reproduction have been seen only at doses that produced significant toxicity to the parent animal.

Diethylene glycol methyl ether has resulted in birth defects in the fetus following high doses which have little relevance to human exposure.

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

Specific Target Organ Effects - Single Exposure

No data.

Specific Target Organ Effects - Repeated or Prolonged Exposure

No data available.

Monoethanolamine: kidney and liver effects were found in the kidney and liver of lab animals at high feeding levels over extended periods of time.



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Repeated exposure to ethylene glycol monobutyl ether has caused hemolysis and secondary effects on the kidney and liver in lab animals. Small but statistically significant increases in tumors were observed in mice but not rats. These effects are not believed to be relevant to humans.

Diethylene glycol methyl ether has produced effects in the liver and kidney of lab animals, and at very high oral doses, in the testes and thymus.

Diethylene glycol butyl ether has had effects on the kidney, liver, and blood of lab animals at high feeding levels over extended periods of time.

Aspiration Hazard

Based upon components, product not expected to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Product Summary

This material is alkaline and may raise the pH of surface waters with low buffering capacity. Product considered toxic to aquatic organisms. (Acute aquatic toxicity category 2 by European Union classification).

Ecotoxicity

LC50/EC50/IC50 for aquatic vertebrates, aquatic invertebrates, and algae estimated to be in the range of 10-100 mg/l. IC50 for bacteria estimated to be >1,000 mg/l. All values estimated using additivity formula.

Persistence and Degradability

No data available. Based upon component data, product is expected to be readily biodegradable.

Bioaccumulative Potential

No data available. Bioaccumulation potential of the materials used in this product are low to moderate.

Mobility in soil

Product consists of water soluble ingredients. Soil mobility for product as a whole would be considered to be high.

Other Adverse Effects

None known

SECTION 13: DISPOSAL CONSIDERATIONS

Product is a D002 Corrosive Hazardous Waste under RCRA definitions. 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.

SECTION 14: TRANSPORT INFORMATION

ID No.: UN3267
Proper Shipping Name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S., (contains ethanolamine)
Hazard Class: 8
Packing Group: III
Label: CORROSIVE
Marine Pollutant: No
RQ: None
Special Precautions: None



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SECTION 15: REGULATORY INFORMATION

TSCA

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

RCRA HAZARD CLASS

D002 corrosive hazardous 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	Section 313	CAA 112(r) TQ	CWA / OPA
1-Butoxyethanol	N230 Glycol ethers			(1)	313		
Diethylene glycol methyl ether				(1)	313		
Diethylene glycol butyl ether				(1)	313		
(1) This material is not subject to any special reporting under the requirements of CERCLA. CERCLA petroleum exclusion applies for this product. Contact local authorities to determine if other reporting requirements apply.							

NEW JERSEY RIGHT-TO-KNOW INFORMATION

This product contains water (CAS# 7732-18-5), ethanolamine (CAS 141-43-5), 1-butoxyethanol (CAS 111-76-2), diethylene glycol methyl ether (111-77-3), ethoxylated nonylphenol (CAS 127087-87-0), and diethylene glycol butyl ether (CAS 112-34-5).

CALIFORNIA PROPOSITION 65 INFORMATION

This product does not contain any chemicals recognized by the state of California to cause cancer and/or birth defects or reproductive harm.

SCAQMD INFORMATION

Is there a photochemically reactive material present? No
What is the % by volume of photochemically reactive material? 0
What is the VOC content? 400 g/l
What is the vapor pressure of VOC's? <1 mm Hg at 20°C

SECTION 16: OTHER INFORMATION

REVISION SUMMARY

New GHS format

SUPERSEDES ISSUE DATE

July 31, 2013

HAZARD RATING SYSTEMS:

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

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



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

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