

**Section 1: Identification**

**Product Name** Diethanolamine (Liquid)  
**Commercial Name** Not available.  
**Product Use** Laboratory chemicals  
**Restrictions On Use** Not available

**Product Code** 50-1302

**Company** PCCA  
 9901 South Wilcrest  
 Houston, TX 77099  
 Phone: 1-800-331-2498  
 Fax: 1-800-874-5760

In case of emergency contact:  
**CHEMTREC (24hr) 1-800-424-9300**

**Section 2: Hazard(s) Identification**

**OSHA Haz Com:** Acute Toxicity - Oral [Category 4] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 1]  
**CFR 1910.1200** Carcinogenicity [Category 2] Toxic to Reproduction [Category 2] Specific Target Organ Toxicity (Repeated Exposure) [Category 2] Target Organs - Liver, Blood, Kidney, Central nervous system (CNS)

**Signal Word** DANGER

**Hazard Statement(s)** Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Suspected of causing cancer. Suspected of damaging fertility. Suspected of damaging the unborn child. May cause damage to organs through prolonged or repeated exposure

**Pictogram(s) or Symbol(s)**



**Precautionary Statement(s):**

**Prevention** Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe dust/fume/gas/mist/vapors/spray

**Response** IF exposed or concerned: Get medical attention/advice Skin IF ON SKIN: Wash with plenty of soap and water If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash before reuse 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 POISON CENTER or doctor/physician Ingestion IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

**Storage** Store locked up.

**Disposal** Dispose of contents/container to an approved waste disposal plan

**Section 3: Composition/Information on Ingredients**

**Substance/Mixture** Substance  
**Components** Diethanolamine  
**% By Weight** 100  
**CAS#** 111-42-2  
**Molecular Weight** 105.14 g/mole  
**Chemical Formula** C<sub>4</sub>H<sub>11</sub>NO<sub>2</sub>  
**Synonym(s)** Not available.

Mixtures				
Name	CAS#	% by Weight	TLV/PEL	LC50/LD50
Diethanolamine	111-42-2	100	TWA: 2 (mg/m <sup>3</sup> )	ORAL (LD50):Acute: 710mg/kg [Rat]. DERMAL (LD50):Acute: 12200mg/kg [Rabbit].

**Section 4: First-Aid Measures**

<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
<b>Symptoms/Effects</b>	
<b>Acute</b>	None reasonably foreseeable. Causes severe eye damage
<b>Delayed</b>	None reasonably foreseeable. Causes severe eye damage
<b>Immediate Medical Attention</b>	
Treat symptomatically	

**Section 5: Fire-Fighting Measures****Suitable Extinguishing Media**

Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical, alcohol-resistant foam.

**Unsuitable Extinguishing Media**

Not available.

**Products of Combustion**

Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>).

**Firefighters Special Equipment and Precautions**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**Section 6: Accidental Release Measures**

**Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

**Environmental Precautions** Do not flush into surface water or sanitary sewer system. Methods for Containment and Clean Up Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

**Section 7: Handling and Storage**

**Handling:** Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. **Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. **Incompatible Materials.** Strong oxidizing agents. Acids. copper. Copper alloys. Aluminium.

**Section 8: Exposure Controls/Personal Protection**

<b>Exposure Limits</b>	ACGIH TLV: TWA: 1 mg/m <sup>3</sup> Skin OSHA PEL: (Vacated) TWA: 3 ppm (Vacated) TWA: 15 mg/m <sup>3</sup> NIOSH IDLH: TWA: 3 ppm TWA: 15 mg/m <sup>3</sup> Mexico OEL (TWA); TWA: 2 mg/m <sup>3</sup>
<b>Engineering Controls</b>	Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.
<b>Personal Protection</b>	Eye/face Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Tight sealing safety goggles. Skin and body protection: Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory Protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

**Section 9: Physical and Chemical Properties**

<b>Appearance</b>	Colorless Solid.		
<b>Odor</b>	Ammonia-like		
<b>Odor Threshold</b>	Not available.		
<b>Melting Point</b>	27 - 30 °C / 80.6 - 86 °F	<b>pH</b>	11 53 g/L (20°C)
<b>Freezing Point</b>	Not available.	<b>Vapor Pressure</b>	2 hPa @ 10 °C
<b>Boiling Point/Range</b>	269.9 °C / 517.8 °F	<b>Vapor Density</b>	Not applicable.
<b>Decomposition temperature</b>	259 °C	<b>Viscosity</b>	Not available.
<b>Partition Coefficient: n-octanol/water</b>	Not available.	<b>Evaporation Rate</b>	Not available.
<b>Flash Point</b>	176 °C / 348.8 °F CC (clos	<b>Autoignition temperature</b>	370 °C / 698 °F
<b>Flammability</b>	Not flammable or combustibl	<b>Flammability or Explosive Limits:</b>	
		<b>Lower</b>	2.1 vol %
		<b>Upper</b>	10.6 vol %
<b>Solubility(ies)</b>	Soluble in water		
<b>Other</b>	Not available.		

**Section 10: Stability and Reactivity**

<b>Reactivity</b>	Not available
<b>Chemical Stability</b>	Stable under normal conditions.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur
<b>Conditions to Avoid</b>	Incompatible products. Excess heat. Avoid dust formation.
<b>Incompatible Materials</b>	Strong oxidizing agents, Acids, copper, Copper alloys, Aluminium
<b>Hazardous Decomposition Products</b>	Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

**Section 11: Toxicological Information**

<b>RTECS</b>	KL2975000
<b>Acute Toxicity</b>	
LD50 Oral: LD50 = 780 mg/kg ( Rat ) LD50 Dermal: LD50 = 11.9 mL/kg ( Rabbit ) LC50 Inhalation: Not listed	
<b>Skin Corrosion/Irritation</b>	
Irritating to skin	
<b>Serious Eye Damage/Irritation</b>	
Risk of serious damage to eyes Severe eye irritant	
<b>Respiratory or Skin Sensitization</b>	
Not available	
<b>Germ Cell Mutagenicity</b>	
Not available	
<b>Carcinogenicity</b>	
Not classified	
<b>Reproductive Toxicity</b>	
Not available	
<b>Routes of Entry</b>	
Eyes. Skin.	
<b>Symptoms Related to Exposure</b>	
Not available.	



## Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Diethanolamine (Liquid)

50-1302

### Potential Health Effects

Not available.

**Target Organ(s)** STOT - repeated exposure Liver Blood Kidney Central nervous system (CNS)

### Section 12: Ecological Information

#### Ecotoxicity

Freshwater Algae: EC50: 2.1 - 2.3 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: = 7.8 mg/L, 72h (Desmodesmus subspicatus) Freshwater Fish: Pimephals promelas: LC50: 140 mg/L/96h Microtox: EC50 = 73 mg/L 5 min EC50 > 16 mg/L 16 h Water Flea: EC50: = 55 mg/L, 48h (Daphnia magna)

#### Persistence and Degradability

Persistence is unlikely

#### Bioaccumulative Potential

Not available

#### Mobility in Soil

Not available

#### Other Adverse Effects

Not available.

### Section 13: Disposal Considerations

#### Waste Disposal

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

#### Disposal of Container

Not available.

#### Other Considerations

Not available

### Section 14: Transport Information

#### DOT Classification

Not regulated.

### Section 15: Regulatory Information

#### Regulations

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable TSCA 12(b) - Notices of Export Not applicable International Inventories Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL). Component CAS No DSL NDSL EINECS PICCS ENCS ISHL AICS IECSC KECL Diethanolamine 111-42-2 X - 203-868-0 X X X X X KE-20959 KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>) U.S. Federal Regulations SARA 313 Component CAS No Weight % SARA 313 - Threshold Values % Diethanolamine 111-42-2 <=100 1.0 SARA 311/312 Hazard Categories See section 2 for more information CWA (Clean Water Act) Not applicable Clean Air Act Component HAPS Data Class 1 Ozone Depleters Class 2 Ozone Depleters Diethanolamine X - OSHA - Occupational Safety and Health Administration Not applicable CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) Component Hazardous Substances RQs CERCLA EHS RQs Diethanolamine 100 lb - California Proposition 65 This product contains the following Proposition 65 chemicals. Component CAS No California Prop. 65 Prop 65 NSRL Category Diethanolamine 111-42-2 Carcinogen - Carcinogen U.S. State Right-to-Know Regulations Component Massachusetts New Jersey Pennsylvania Illinois Rhode Island Diethanolamine X X X X X U.S. Department of Transportation Reportable Quantity (RQ): Y DOT Marine Pollutant N DOT Severe Marine Pollutant N U.S. Department of Homeland Security

#### Other

Not available.



## Safety Data Sheet

For Compliance with OSHA 29 CFR 1910.1200 and ANSI Z400.1-1998

Diethanolamine (Liquid)

50-1302

### Section 16: Other Information

Not available.