



## Material Safety Data Sheet

FR-QC-14/Rev 00

### 1. Product and Company Identification

Material name: **Monoethanolamine**  
Revision date: -  
CAS Number: 141-43-5  
Manufacturer: Padideh Shimi Gharb Co.  
No.3, 21St. Alley, Vozara St., Argentina Sq, Tehran, Iran  
+98 (21) 43413408  
www.psgiran.com  
Email: PSG-Sales@PSPaydar.co

### 2. Hazards Identification

#### HSNO Hazard Classification

Production non-hazardous

#### Emergency overview

Flammable solid. The toxicological properties of this material have not been fully investigated. Causes eye, skin, and respiratory tract irritation. Target Organs: Respiratory system, eyes, skin.

#### Potential health effects

Eyes: Causes eye irritation. May cause chemical conjunctivitis.  
Skin: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.  
Inhalation: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.  
Ingestion: May be harmful if inhaled.

### 3. Composition / Information on Ingredients

Components	Percent	Molecular weight	Formula
Monoethanolamine % by weight	> 99.0	61.0 – 62.5 g/mol	C <sub>2</sub> H <sub>7</sub> NO

### 4. First Aid Measures

#### First aid procedures

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention immediately. Finish by rinsing thoroughly with running water to avoid a possible infection.

Skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold



## Material Safety Data Sheet

FR-QC-14/Rev 00

Inhalation:	water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Notes to physician:	Symptoms may be delayed.
General advice:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire Fighting Measures

Flammable properties	Combustible
Auto-ignition Temperature:	410 °C (770 °F)
Flash Points:	CLOSED CUP: 86°C (186.8°F). OPEN CUP: 93.34°C (200°F) (Cleveland).
Flammable Limits:	LOWER: 3% UPPER: 23.5%
Products of Combustion:	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> ...).
Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Protection of firefighters:	Specific hazards arising from the chemical. During fire, gases hazardous to health may be formed.
Protective equipment and precautions for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Specific methods:	Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

### 6. Accidental Release Measures

Personal precautions:	Use rubber gloves, air respirator, goggles, safety shoes and lab coat. Remove contaminated clothing and wash hands between breaks and at end of duty hours. Locate eye washes and emergency showers in all work and storage areas.
Environmental precautions:	Do not let product enter drains.
Methods for containment:	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Collect spillage.
Methods for cleaning up:	Remove all potential ignition sources. Contain spilled material. Cover with an inert or noncombustible inorganic absorbent material, sweep up and remove to an approved disposal container. Clean with hot water & detergents. Observe state, federal & local disposal regulations.



## Material Safety Data Sheet

FR-QC-14/Rev 00

### 7. Handling and Storage

Handling:

Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

Storage:

Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Sensitive to light. Store in light-resistant containers. Hygroscopic.

### 8. Exposure Controls / Personal Protection

Exposure limits of the chemical substance, biological exposure limits and etc.

one established.

Appropriate engineering controls:

Use normal precautionary measures for handling chemicals.

#### Personal protective equipment

Protection of respiratory system:

ear air respirator

Eye protection:

Wear goggles

Hand protection:

ear protective gloves

Body protection:

Wear protective clothing, safety shoes

Hand protection:

Wear protective gloves

Body protection:

Wear protective clothing, safety shoes

### 9. Physical & Chemical Properties

Physical state and appearance:

Liquid. (Viscous liquid.)

Odor:

Ammoniacal. Fish. Unpleasant.

Taste

Not available.

Molecular Weight

61.0 - 62.5 g/mole

Color

Colorless. Clear

pH (1% soln/water)

$\geq 10$

Specific Gravity

1.016 – 1.020 (Water = 1)

Water

Max. 0.2

### 10. Stability & Reactivity

Chemical stability:

The product is stable.

Conditions to avoid:

Heat, ignition sources, incompatible materials, light, moisture.

Incompatible materials:

Reactive with oxidizing agents, acids.

Hazardous decomposition products:

Upon decomposition, this product may yield sulfur dioxide and oxides of sulfur.



## Material Safety Data Sheet

FR-QC-14/Rev 00

Corrosivity:

Highly corrosive in presence of aluminum, of copper.

### 11. Toxicological Information

#### Information on toxicological effects

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.  
Skin corrosion/irritation: Not available  
Serious eye damage/eye irritation: Not available  
Respiratory or skin sensitization: Not available  
Germ cell mutagenicity: Not available

#### Potential health effects

Inhalation: Not available  
Ingestion: Not available  
Skin: Not available  
Eyes: Not available

Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### 12. Effects on the Environment

Toxicity: Not available  
Persistence and degradability: Readily biodegradable  
Bioaccumulative potential: Not available  
Mobility in soil: Not available  
Other adverse effects: Not available

### 13. Disposal Considerations

Disposal methods: Waste may be disposed of by a licensed waste disposal company.  
Follow local, state and federal disposal regulations.  
Disposal instructions: Dispose in accordance with all applicable regulations.  
Waste from residues/unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).  
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

### 14. Transport Information

DOT Classification: Class 8: Corrosive material  
Identification: Ethanolamine UNNA: 2491 PG: III  
Special Provisions for Transport: Not available.



## Material Safety Data Sheet

FR-QC-14/Rev 00

### 15. Regulatory Information

Reportable Quantity:

Not available.

### 16. Other Information

HMIS® ratings (estimated):

Health: 1

Flammability: 1

Physical hazard: 0

Personal protection: E

NFPA ratings (estimated):

Health: 1

Flammability: 1

Instability: 0

Disclaimer:

Terms and Conditions. This MSDS is designed only as guidance for the products to which it applies. To the greatest extent permitted by applicable law, nothing contained herein creates any legal obligation including contractual obligations, expressed or implied warranties, including any warranties of merchantability or fitness for particular purpose; or confers any intellectual property rights, including rights to use trademarks or a license to use patents, issued or pending. The information contained herein is based on the manufacturer's own study and the work of others, and is subject to change at any time without further notice. There is no warranty, expressed or implied, as to the accuracy, completeness or adequacy of the information contained herein, and neither the provider nor the manufacturer (nor the agents, directors, officers, contractors or employees of either) are liable to any party for any damages of any nature, including direct, special or consequential damages arising out of or in connection with the accuracy, completeness, adequacy or furnishing of any information in this MSDS, or in any other way related (directly or indirectly) to this MSDS. The receipt and use of this information constitute consent to these terms and conditions.

Issue date:

2021.12.04