Safety Data Sheet

Better Chemistry. **Better Business**111111

HUBSOL 4

3/7/23

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call poison center or doctor and explain the type of exposure to the chemical(s) and provide the name of the chemical(s).
Specific treatment - refer to poison center or doctor for advice.
Wash contaminated clothing before reuse.

Storage: Store in a well ventilated place. Keep cool .
Store locked up.

Disposal: Dispose of contents/container in accordance with local, regional, national, or international regulations.

Chemical Name	Common Name And Synonyms	CAS No. and other Unique identifiers	Concentration %
Monoethanolamine	Ethanolamine	141-43-5	Approx 22%

After Inhalation:

If inhaled: Remove person to fresh air and keep comfortable for breathing. Get medical attention.

After Skin Contact:

Take off immediately all contaminated clothing. Wash off IMMEDIATELY with plenty of water for at least 15-20 minutes. Get medical attention immediately! Wash clothing separately before reuse. Destroy or thoroughly clean all contaminated shoes.

After Eye Contact:

Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Call a physician or poison control center immediately.

After Ingestion:

DO NOT induce vomiting. Immediately give large quantities of water or milk, if available. If vomiting does occur, give fluids again. Never give anything by mouth to an unconscious person. Call a physician or the nearest Poison Control Center.

Most Important Symptoms/Effects

Inhalation:

Prolonged excessive exposure may cause adverse effects. Excessive exposure may cause irritation to the upper respiratory tract (nose and throat).

Eye:

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur. Vapor may cause eye irritation experienced as mild discomfort and redness.

Skin:

Brief contact may cause skin burns. Symptons include pain, severe local redness and tissue damage. Classified as corrosive to skin according to DOT guidelines.

Ingestion:

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury, however, swallowing larger amounts may cause injury. Swallowing may result in burns of the mouth and throat.

Note to Physicians:

Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture. Aspiration of vomitus may cause lung injury. Suggest endotracheal/esophageal control if lavage is done. Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an opthamologist. If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Treatment of exposure should be directed at the control symptons and the clinical condition of the patient.

Suitable and Unsuitable extinguishing media:	In case of fire: Use water spray (fog), foam, dry chemicals, carbon dioxide, or other type of vapor producing extinguisher. Do not use direct water stream. May spread fire.
Specific hazards arising from the chemical:	Nitrogen oxides may be produced. Carbon oxides may be produced.
Special protective equipment and precautions for firefighter	Fire fighters should enter area only if they are protected from all contact with the materail. Full protective clothing, including self-contained breathing apparatus, coat, pants, gloves, boots and bands around legs, arms, and waist, should be worn. No skin surfaces should be exposed.

Personal Precautions, Protective Equipment, & Emergency Proc	Wear appropriate chemical protection equipment such as gloves, face-shield, goggles and suitable body protection to prevent contamination of skin, eyes and personal clothing.
Methods and Materials for containment & cleaning up:	If trained in accordance 29 CFR 1910.120, leaks should be stopped. Spills should be contained and cleaned immediately. Persons performing clean up work should wear adequate personal protective equipment and clothing. Spills and releases should be reported, if required, to the appropriate local, state and federal regulatory agencies.

Precautions for safe handling:	Avoid breathing dust, fumes, gas, mist, vapors and sprays. Use in well ventilated area. Wash hands thoroughly after handling. Wear rubber gloves, goggles and chemical protective clothing. Do not get in eyes, or on skin, or on clothing. Eating, drinking and smoking in the work area is prohibited. Keep container tightly closed.
Conditions for safe storage, inc any incompatibilities:	Do not store in steel drums.

Name	Std.	TWA-8hrs	STEL - 15 min.
Monethanolamine	ACGIH	3 ppm	6 ppm

ACGIH - American Control of Governmental Hygenists
OSHA - Occupational Safety and Health Administration

Protective Gloves:	Butyl or neoprene gloves
Eye Protection:	Wear chemical safety goggles.

Appearance:	Red liquid
Odor:	Slight amine odor
Odor Threshold:	N/A
PH:	12-13
Melting Point/Freezing Point:	N/A
Initial Boiling Point and Boiling Range:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability (solid, gas):	Non flammable
Upper/Lower flammability or explosive limits:	N/A
Vapor Pressure:	N/A
Vapor Density:	2.1
Relative Density:	1.01
Solubility (ies):	Complete in water
Partition Coefficient; n-octanol/water:	N/A
Auto-ignition Temperature:	N/A
Decomposition Temperature:	N/A
Viscosity:	N/A

Chemical Stability:	Stable under normal conditions
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur.
Incompatible Materials:	Avoid contact with strong oxidizers and strong acids. Avoid contact with aluminum, tin, zinc. halogenated solvents, and strong oxidizers and acids.
Hazardous Decomposition Products:	not known

Oral Administration:	Monoethanolamine-LD50-rat-1720 mg/kg
Dermal administration:	Monoethanolamine-LD50-Rabbit-1015 mg/kg
Cancer Hazard:	Not listed by IARC, NTP, OSHA, ACGIH

Daphnia Magna,	Monoethanolamine-LC50-33-93 mg/L
Persistence and Degradability:	Not Available
Bioaccumulation potential:	No data available
Soil/Sediment Result:	No data available

Dispose of in accordance with local, state and federal regulations.

UN Number:	2491
UN Proper Shipping Name:	ETHANOLAMINE SOLUTION,
Transport Hazard Class (es):	8
Packing Group:	III
ERG:	153

HMIS: Health: 1 Flammability: 0 Reactivity: 0

Sara Hazard Classification	The chemicals in this product are not subject to SARA Title III, Section 313 Reporting Requirements.
Proposition 65	No Proposition 65 listed components in this formula
TSCA Inventory Status	All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements .

REACH status	No **RoHS** or **REACH SVHC** are contained in this product.
Disclaimer:	The information is based on our knowledge to date but does not constitute an assurance of product properties and does not imply a legal contractual relationship.
Date Prepared:	11/18/14