Safety Data Sheet

Better Chemistry. Better Business

MI-TIQUE® GREEN T 2 Revised: 5/20/15

1 IDENTIFICATION

Product Code : 2300006

Recommended use of the chemical and restrictions on use: Industrial applications

Hubbard-Hall Inc.
563 South Leonard Street
Waterbury, CT 06708
Telephone : 203-756-5521
Fax number: 203-756-9017

Emergency Phone Number
CHEMTREC: 1 (800) 424-9300
International: 1 (703) 527-3887

2 HAZARDS IDENTIFICATION

Signal Word:	DANGER
Hazard Category:	Skin Corrosion/Irritation Hazard Category 1A
	Eye Damage/Irritation Hazard Category 1
	Corrosive to Metals Hazard Category 1
Hazard Statements:	Causes severe skin burns and eye damage.
	May be corrosive to metals.
Prevention:	Wash skin thoroughly after handling.
	Wear rubber gloves, goggles and chemical protective clothing.
	Keep only in original container.
Response:	If on skin (or hair): Take off immediately all contaminated clothing Rinse skin with water/shower .
	Wash contaminated clothing before reuse.
	Specific treatment - refer to poison center or doctor for advice.
	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Absorb spillage to prevent material damage.
	If exposed or concerned: Get medical advice/attention.
Storage:	Store locked up.
	Store in corrosive resistant high density polyethylene container.
Disposal:	Dispose of contents/container in accordance with local, regional, national, or international regulations.

3 COMPOSITION INFORMATION

Chemical Name	Common Name And Synonyms	CAS No. and other Unique identifiers	Concentration %
Ammonium Hydroxide	Ammonia	7664-38-2	<7%
Ammonium Chloride	-	12125-02-9	15-20%
Copper Acetate	-	142-71-2	~4%
Ammonium Dimolybdate	-	27546-07-2	<5%

4 FIRST AID

After Inhalation:

Remove exposed person to fresh air and support breathing as needed.

After Skin Contact:

Immediately remove contaminated clothing under a safety shower. Flush all affected areas with large amounts of water for 15 minutes. DO NOT attempt to neutralize with chemical agents. Obtain medical advice.

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:

Call a physician or poison control center immediately. Do not induce vomiting. Immediately rinse mouth and drink plenty of water. If vomiting occurs, keep head low so that the stomach content doesn't get into the lungs. Never give anything by mouth to an unconscious person. Do not use mouth-to-mouth method if victim ingested the substance.

Most Important Symptoms/Effects

Inhalation:

Symptons may include irriitation to the nose, throat and upper respiratory tract.

Inhalation:

Selenium dusts produce respiratory tract irritation manifested by nasal discharge, loss of smell, epitaxis, and cough. A group of workers exposed to undetermined amounts of selenium oxide developed severe irritation of the eyes, nose, and throat, followed by headchaches.

Eye:

Adverse symptons may include the following: Symptons may include redness, pain, blurred vision, eye burns and permanent eye damage.

Skin:

Adverse symptons may include the following: May cause redness, pain and severe skin burns.

Ingestion:

Adverse symptons may include the following: Symptons may include severe burns of the mouth, throat and stomach. Ingestion of large quantities may cause gastrointestinal irritation, vomiting and diarrhea.

Suitable and Unsuitable extinguishing media:	Will not burn or support combustion. Use extinguishing media appropriate for surrounding fire, such as water spray, dry chemical, foam or carbon dioxide.
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 appa7.9C ET QyaTn, e f-cokSgl cookSed (F

Personal Precautions, Protective Equipment, & Emergency Proc	Wear chemical goggle, gloves and face shield and protective clothing.
	Prevent spilled product from drains, sewers, waterways and soil.
Methods and Materials for containment & cleaning up:	Absorb the chemical onto sand, vermiculite, or any other non-combustible absorbent, and collect into containers for later disposal.

7 HANDLING AND STORAGE

Precautions for safe handling:	Avoid breathing dust, fumes, gas, mist, vapors and sprays.
	Wash hands thoroughly after handling.
	Do not get in eyes, or on skin, or on clothing.
Conditions for safe storage, inc any incompatibilities:	Keep container tightly closed.
	Do not allow material to freeze.
	Store in corrosive resistant container.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Name	Std.	TWA-8hrs	STEL - 15 min.
Ammonium Hydroxide	ACGIH	25 ppm	35 ppm
Ammonium Chloride	ACGIH	10 mg/m3	20 mg/m3
Copper Acetate	Not established		
Ammonium Dimolybdate	ACGIH	5 mg/m3 as molybdenum	

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

Ventilation:	Use local exhaust to keep personal exposures below the OSHA Permissible Exposure Limit (s) (PEL) or the ACGIH threshold Limit Values (TLV)Time Weight Average (TWA).
Respiratory Protection:	Not required if proper ventilation controls are employed.
Protective Gloves:	Acid resistant rubber.
Eye Protection:	Wear chemical safety goggles.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear blue liquid
Odor:	ammonia smell
Odor Threshold:	N/A
PH:	9-10
Melting Point/Freezing Point:	N/A
Initial Boiling Point and Boiling Range:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
	N/A

Vapor Density:	N/A
Relative Density:	1.08-1.10
Solubility (ies):	Complete in water
Partition Coefficient; n-octanol/water:	N/A
Auto-ignition Temperature:	N/A
Decomposition Temperature:	N/A
Viscosity:	N/A

10 STABILITY AND REACTIVITY

Reactivity:	No specific test data related to reactivity vavailable to this product or its ingredients.
Chemical Stability:	Stable under normal conditions Corrosive in presence of steel
Possibility of Hazardous Reactions:	Reacts violently with strong bases. Contact with metals may release flammable hydrogen gas.
Conditions to Avoid:	Extreme humidity, excess heat.
Incompatible Materials:	Avoid contact with strong oxidizers and strong acids.
Hazardous Decomposition Products:	Thermal decomposition products include oxides of nitrogen.

11 TOXICOLOGICAL INFORMATION

Oral Administration:	Ammonium Chloride-LD50(Rat)-1650 mg/kg
Oral Administration:	Copper Acetate LD50(Rat)-501 mg/kg
Inhalation:	Ammonium Hydroxide-LC50-(Rat)-2000 ppm / 4 hr
Immediate effects:	Irritation or burns to skin, eyes and respiratory system
Routes of Exposure	Eyes, Skin, Inhalation, Ingestion

12 ECOLOGICAL INFORMATION

Crustations, Daphnia magna,	no data available
Persistence and Degradability:	Not Available
Bioaccumulation potential:	Not known
Soil/Sediment Result:	Pronounced solubility and mobility
Other adverse effects(such as hazardous to the ozone layer):	Not known

13 DISPOSAL CONSIDERATION

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

14 TRANSPORT INFORMATION

UN Number:	1760
UN Proper Shipping Name:	CORROSIVE LIQUIDS,NOS(AMMONIUM HYDROXIDE)
Transport Hazard Class (es):	8
Packing Group:	III
ERG:	154

15 REGULATORY INFORMATION

HMIS: Health: 2 Flammability: 0 Reactivity: 0

Cercla	Ammonium Chloride-RQ=5000 lbs
Cercla	Ammonium Hydroxide-RQ=1000 lbs

16 OTHER INFORMATION

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.