

Safety Data Sheet

Adena 3333

SECTION I - IDENTIFICATION



General Products & Supply, Inc.
Murrysville Industrial Park
Export, PA 15632
(888) 247-2312
CHEMTEL :..... (800) 225-3924

Product Number AD3333
Product Name Adena 3333
Chemical Family Water Treatment Compound, Liquid
CAS Number Multiple
Date Prepared 11/10/2015
Revision Number 11/10/2015
Recommended Use Corrosion Inhibitor

SECTION II - HAZARDOUS IDENTIFICATION

GHS CLASSIFICATION:

Classification

Flammable Liquids	Category 4
Corrosive to Metals	Category 1
Acute Toxicity, Oral	Category 4
Acute Toxicity, Dermal	Category 4
Skin Corrosion/Irritation	Category 1A, B, C
Sensitization, Skin	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Acute Toxicity, Inhalation	Category 4
Reproductive Toxicity	Category 2
Specific target organ toxicity, repeated exposure	Category 2
Hazardous to the aquatic environment, acute hazard	Category 3

DANGER!

GHS LABEL:



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Hazard Statements

H227	Combustible liquid
H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H332	Harmful if inhaled
H361	Suspected of damaging fertility or the unborn child
H373	Causes damage to organs through prolonged or repeated exposure
H402	Harmful to aquatic life

Precautionary Statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition, sources. No smoking.
P234	Keep only in original packaging
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of water/...
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304+340	IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.
P308+313	IF exposed or concerned: get medical advice/attention.

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P310	Immediately call a POISON CENTER or doctor/physician.
P312	Call a POISON CENTER or a doctor/physician if you feel unwell.
P314	Get medical advice/attention if you feel unwell.
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P333+313	If skin irritation or a rash occurs: Get medical advice/attention.
P362+364	Take off immediately all contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P370+378	In case of fire: Use..... to extinguish.
p390	Absorb spillage to prevent material damage.
P403	Store in a well ventilated place.
P405	Store locked up.
P406	Store in a corrosive resistant/... container with a resistant inner liner.
P501	Dispose of contents/container to...

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

The precise composition of this product is proprietary information. In the event of a medical emergency, a complete disclosure will be provided to medical personnel.

Component Name	CAS #	Component%	OSHA PEL	ACGIH TLV
Cyclohexylamine	108-91-8	10	10 ppm	10 ppm
Morpholine	110-91-8	10	20 ppm	20 ppm
N,N-Diethylaminoethanol	100-37-8	10	2 ppm	2 ppm
Demineralized water	7732-18-5	Balance	Not Established	Not Established

SECTION IV - FIRST AID MEASURES

Contact with eyes: Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eyespecialist.

Skin contact: Immediately wash thoroughly with plenty of water, apply sterile dressings, and consult a skin specialist.

Inhalation: If exposure by inhalation is suspected, immediately move exposed individual to fresh air. If individual experiences nausea, headache, dizziness, has difficulty in breathing or is cyanotic, seek a health care professional immediately.

Ingestion: Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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SECTION V - FIREFIGHTING MEASURES

Suitable Extinguishing Media: Water fog, foam, CO₂, dry chemical.

Special Fire Fighting Procedures Use self-contained breathing apparatus and full bunker gear in fire areas. Evacuate all unprotected personnel from area. Keep containers cool with water fog to minimize swelling taking care not to spread flames with water used for cooling. Do not flush down sewers or other drainage systems.

Unusual Fire Fighting Hazards: Hazardous decomposition products: Ammonia. Carbon oxides (Cox). Nitrogen oxides (Nox). Hydrogen chloride. Hydrogen cyanide (hydrocyanic acid) may be produced in the event of combustion in an oxygen deficient atmosphere.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. (Also see Section 8). Wear suitable protective equipment. Do not touch damaged containers or spilled material unless wearing suitable protective clothing.

Environmental Precautions: Contain spill if it can be done with minimal risk. Prevent liquid from entering drains, sewers or waterways. Notify proper authorities. Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: Dike far ahead of liquid spill for later disposal.

Methods for Cleaning Up: Small spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: Dike far ahead of liquid spill for later disposal.

SECTION VII - HANDLING AND STORAGE

Handling and Storage:

- Store materials to avoid sources of ignition and excessive heat.
- Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Keep container closed. Use only with adequate ventilation. Use good personal hygiene practices. Wash hands before eating, drinking, smoking. Remove contaminated clothing and clean before re-use.

SECTION VIII - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component Name	CAS #	OSHA PEL	ACGIH TLV
Cyclohexylamine	108-91-8	10 ppm	10 ppm
Morpholine	110-91-8	20 ppm	20 ppm
N,N-Diethylaminoethanol	100-37-8	2 ppm	2 ppm
Demineralized water	7732-18-5	Not Established	Not Established

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Engineering Controls: Local exhaust ventilation may be necessary to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Provide mechanical ventilation for confined spaces. Use explosion-proof ventilation equipment.

Monitoring: Have eye wash stations and safety showers readily available.
When using, do not eat, drink or smoke. Do not get this material in your eyes, on your skin, or on your clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

Personal Protective Equipment (PPE)

Eye Protection: Wear chemical safety goggles and face shield. Have eye-wash stations available where eye contact can occur.

Skin Protection: Avoid skin contact. Wear gloves impervious to conditions of use. Additional protection may be necessary to prevent skin contact including use of apron, face shield, boots or full body protection. A safety shower should be located in the work area.

Respiratory Protection: If exposure limits are exceeded, NIOSH approved respiratory protection should be worn. A NIOSH approved respirator for organic vapors is generally acceptable for concentrations up to 10 times the PEL. For higher concentrations, unknown concentrations and for oxygen deficient atmospheres, use a NIOSH approved air-supplied respirator. Engineering controls are the preferred means for controlling chemical exposures. Respiratory protection may be needed for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA 29 CFR 1910.134.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear to Pale Yellow Liquid
Odor	Fishy
pH@25°C	11.5-12.5
Melting/Freezing Point	Not known
Flashpoint	177°F
Specific Gravity	0.96
Solubility	Complete
Auto-Ignition Temperature	Not known
Decomposition Temperature	Not known
VOC Content	100%
Odor Threshold	Not known
Boiling Range	~131°C @ 760 mm Hg
Evaporation Point	Not known
Flammable Limits - Upper	10.5% by volume
Flammable Limits - Lower	1.5% by volume
Vapor Pressure	Not known
Vapor Density (Air=1)	Not known
Viscosity	Water-Like

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SECTION X - STABILITY AND REACTIVITY

Stability:	Stable, under normal conditions of storage and handling.
Conditions to Avoid:	Contact with incompatible materials. Avoid all sources of ignition: heat, sparks and open flame. Avoid electro-static charge.
Hazardous Decomposition/Byproducts:	Possible thermal decomposition products: carbon oxides, nitrogen oxides.
Hazardous Polymerization:	Will not occur.
Polymerization Conditions to Avoid:	None
Incompatibilities:	Strong Acids, Ammonium compounds, Reducing Agents (particularly cyanides, thiocyanates, and thiosulfates).

SECTION XI - TOXICOLOGICAL INFORMATION

Likely Route of Exposure:	Inhalation, Skin, Eye, Ingestion.
Inhalation:	Breathing spray or mists can be harmful. Can cause damage to nasal and respiratory passages.
Eye Contact:	Causes eye irritation including stinging, watering and redness which may result in corneal injury.
Skin Contact:	Contact may cause mild stinging irritation including redness, burning and drying/cracking of the skin. Can be painful if skin is confined in gloves, clothing, etc.
Ingestion:	Causes corrosion, burns to mouth and esophagus, abdominal pain, chest pain, nausea, vomiting, diarrhea, seizures. Aspiration of the swallowed or vomited product can cause severe pulmonary complications.
Acute Toxicity Value:	See Health Hazards below. Oral Type of value: LD50 Species: rat Value: 470 mg/kg Inhalation Type of value: LC50 Species: rat Value: 7.4 mg/l Exposure time: 4 h Species: rat Value: (IRT) Exposure time: No Data No Mortality within the stated exposition time as shown in animal studies, however, deaths occurred after longer exposure. Dermal Type of value: LD50 Species: rabbit Value: 240 mg/kg Literature data.
Chronic (Long Term) Effects:	See Health Hazards above.

Toxicity:

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Component Name	LD50	LC50
Cyclohexylamine	Oral Rat 300 mg/kg Dermal Rabbit 277 mg/kg	Inh. Rat 7500 mg/m3
Morpholine	Dermal Rabbit 500 mg/kg Oral Rat 1,1910 mg/kg	Inh. Rat 8 mg/l
N,N-Diethylaminoethanol	Dermal Rabbit- 1,100 mg/kg- Oral Rat- 1,300 mg/kg	Inh. Rat- 4.6 mg/l (4h)
Demineralized water	Not Established	Not Established

Reproductive Effects Fertility

Teratogenicity Not Applicable

Mutagenicity Not Applicable

Embryotoxicity Not Applicable

Sensitization to Product Skin

Synergistic Products Not Applicable

Carcinogenicity Not Applicable

SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life.
LC50 (96 h) 30 mg/l, Oncorhynchus mykiss (static) The details of the toxic effect relate to the nominal concentration. The study was carried out in soft water. Literature data. Aquatic invertebrates EC50 (48 h) 15 mg/l, Daphnia magna (DIN 38412 Part 11, static) The details of the toxic effect relate to the nominal concentration. Literature data. Aquatic plants No Data

Mobility: Information not available.

Degradability: Expected to biodegrade.

BioAccumulation: Information not available.

SECTION XIII - WASTE DISPOSAL CONSIDERATIONS

Waste disposal of substance:

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

If containers are not empty, they must be disposed of in a RCRA-licensed facility. RCRA empty containers may be landfilled at a licensed facility; other containers must be disposed of in a RCRA licensed facility.

RCRA:D001

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SECTION XIV - TRANSPORT INFORMATION

DOT SHIPPING INFORMATION

Proper Shipping Name: Amines, liquid, corrosive, n.o.s.

Contains: Cyclohexylamine, Morpholine, Diethylethanolamine

Hazard Class and Label: 8

Identification Number: UN2735

Packaging Group: III

Other Shipping Info: SPECIAL PRECAUTIONS FOR USER: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not established.

SECTION XV - REGULATORY INFORMATION

TSCA STATUS:..... The components of this product are listed on the TSCA Inventory

SARA TITLE III SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCE:

Component Name	CAS #	% by wt.	RQ (lbs.)	TPQ (lbs.)
Cyclohexylamine	108-91-8	10	10,000	10,000

SARA TITLE III SECTION 311/312 HAZARD CATEGORIZATION:

Acute	Chronic	Fire	Pressure	Reactive
X	X	X	N/A	N/A

SARA TITLE III SECTION 313 SUPPLIER INFORMATION:

No chemicals in this material are subject to the reporting requirements.

CERCLA SECTION 102(a) HAZARDOUS SUBSTANCE:

Component Name	CAS #	% by wt.	RQ (lbs.)
Morpholine	110-91-8	10	100

CALIFORNIA PROPOSITION 65:

This product does contains less than 1% of a chemical known to the state of California to cause birth defects or other productive harm: Morpholine Contains less than 1% of Ethylene Glycol Monomethyl Ether (CAS# 109-86-4). Cancer: (No), Reproductive: (Yes). Maximum acceptable dosage level: 63 µg/day (ingestion)

SECTION XVI - OTHER INFORMATION

HMIS Health:..... 3

HMIS Flammability:..... 3

HMIS Reactivity: 1

Additional: Federal Law. Also contact appropriate state and local regulatory agencies. 49CFR 172.101, APPENDIX A, TABLE 1, REPORTABLE QUANTITY NO COMPONENTS ARE LISTED Toxic Substances Control Act (TSCA): All

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components of this product are included on the TSCA inventory. Clean Water Act (CWA): not applicable COMPONENT CWA-HA) ARDOUS SUBSTANCES CWA-REPORTABLE QUANTITIES CWA-TOXIC POLLUTANTS CWA-PRIORITY POLLUTANTS CYCLOHEXYLAMINE 1000 LB

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