

SAFETY DATA SHEET (S.D.S.)

SECTION I - IDENTIFICATION

	Adena Technologies 101 Technology Lane Export, PA 15632 (888) 247-8082 Emergency..... (800) 255-3924
---	--

Product Number	AD9600
Product Name	Adena 9600
Chemical Family	Water Treatment Compound, Liquid
CAS Number	Multiple
Date Prepared	9/22/2015
Revision Number	9/22/2015
Recommended Use	Scale Inhibitor

SECTION II - HAZARDOUS IDENTIFICATION

GHS CLASSIFICATION:

Classification

Corrosive to Metals	Category 1
Acute Toxicity, Oral	Category 4
Acute Toxicity, Dermal	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2B
Acute Toxicity, Inhalation	Category 4
Hazardous to the aquatic environment, acute hazard	Category 3

WARNING!

GHS LABEL:



Hazard Statements

H290	May be corrosive to metals
H302	Harmful if swallowed
H312	Harmful in contact with skin
H315	Causes skin irritation
H320	Causes eye irritation
H332	Harmful if inhaled
H402	Harmful to aquatic life

Safety Data Sheet

Precautionary Statements

P234	Keep only in original container.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated are.
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.
P302+352	IF ON SKIN: Wash with soap and water.
p304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P312	Call a POISON CENTER or a doctor/physician if you feel unwell.
P322	Specific measures (see ... on this label).
P330	Rinse mouth.
P332+313	If skin irritation occurs: get medical advice/attention.
P337+313	If eye irritation persists get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
p390	Absorb spillage to prevent material damage.
P404	Store in a closed container.
P501	Dispose of contents/container to an approved waste disposal plant.

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
Sodium Glucoheptonate	31138-65-5	8-10		
1-Hydroxyethylidene-1,1-diphosphonic acid	0002809-21-4	6-8		
Acrylic Terpolymer	None Listed	6-8		
Polyacrylate	68479-09-4	2-4		
SCALE CONTROL AGENT	NONE LISTED	6-8		
Water	7732-18-5	Balance	Not Established	Not Established

Safety Data Sheet

SECTION IV - FIRST AID MEASURES

- Contact with eyes:** Eye irritation. Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
- Skin contact:** For minor skin contact, avoid spreading material on unaffected skin. In case of contact with substance, immediately flush skin with running water for at least 20 minutes.
- Inhalation:** Remove victim to fresh air. Administer oxygen or artificial respiration if breathing is affected or stopped. Avoid Mouth to mouth resuscitation Seek immediate medical attention.
- Ingestion:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION V - FIREFIGHTING MEASURES

Suitable Extinguishing Media: As appropriate for the surrounding fire.

Special Fire Fighting Procedures Do not flush down sewers or other drainage systems.

Unusual Fire Fighting Hazards: None known.

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).
- Environmental Precautions:** 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:**
- 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.

Safety Data Sheet

- Store in tightly closed containers in cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles. Store at ambient or lower temperature. Store out of direct sunlight. Keep containers tightly closed and upright when not in use. Protect against physical damage. Empty containers may contain harmful residue or vapors.

SECTION VIII - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component Name	CAS #	OSHA PEL	ACGIH TLV
Sodium Glucoheptonate	31138-65-5		
1-Hydroxyethylidene-1,1-diphosphonic acid	0002809-21-4		
Acrylic Terpolymer	None Listed		
Polyacrylate	68479-09-4		
SCALE CONTROL AGENT	NONE LISTED		
Water	7732-18-5	Not Established	Not Established

Engineering Controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Monitoring: When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Personal Protective Equipment (PPE)

Eye Protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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

Safety Data Sheet

Appearance	DARK BROWN LIQUID
Odor	Slight sweet
pH@25°C	4.0-5.2
Melting/Freezing Point	32°F
Flashpoint	>200°F
Specific Gravity	1.13 g/ml @ 20°C
Solubility	Complete
Auto-Ignition Temperature	NE (NOT ESTABLISHED)
Decomposition Temperature	NE (NOT ESTABLISHED)
VOC Content	% Volatile: ~50%(water)
Odor Threshold	NO DATA
Boiling Range	212°F
Evaporation Point	NE (NOT ESTABLISHED)
Flammable Limits - Upper	N/A
Flammable Limits - Lower	N/A
Vapor Pressure	NE (NOT ESTABLISHED)
Vapor Density (Air=1)	NE (NOT ESTABLISHED)
Viscosity	10-20 cP @ 25°C

SECTION X - STABILITY AND REACTIVITY

Stability: This material is chemically stable under normal and anticipated storage, handling and processing conditions.

Conditions to Avoid: Contact with incompatible materials.

Hazardous Decomposition/Byproducts: Possible thermal decomposition products: carbon oxides, nitrogen oxides.

Hazardous Polymerization: Will not occur.

Polymerization Conditions to Avoid: None

Incompatibilities: Strong oxidizers

Safety Data Sheet

SECTION XI - TOXICOLOGICAL INFORMATION

Likely Route of Exposure: Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Inhalation: Under normal conditions of use, no health effects are expected.

Eye Contact: This material can cause significant eye irritation.

Skin Contact: No harmful effects from skin adsorption are expected.

Ingestion: Low degree of toxicity by ingestion.

Toxicity:

Component Name	LD50	LC50
Sodium Glucoheptonate		
1-Hydroxyethylidene-1,1-diphosphonic acid	Oral LD50 2,400.00, Rat, Skin LD50 10,000.00 Rabbit	96 hr LC50 Rainbow trout (Oncorhynchus mykiss): 368
Acrylic Terpolymer		
Polyacrylate		Fish- (96h) > 100 mg/l- L9Fish- (96h) > 100 mg/l
SCALE CONTROL AGENT		
Water	Not Established	Not Established

Reproductive Effects	Teratogenicity	Mutagenicity	Embryotoxicity	Sensitization to Product	Synergistic Products
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicity: Harmful to aquatic life.
BLUEGILL: 400 MG/L, LC50, 48 HR FATHEAD MINNOW 525 MG/L, LC50, 96
HR CERIODAPHNIA MAGNA: 259 MG/L, LC50, 48 HR

Mobility: Information not available.

Safety Data Sheet

Degradability: Expected to biodegrade.

BioAccumulation: Not expected to bioaccumulate.

SECTION XIII - WASTE DISPOSAL CONSIDERATIONS

DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

SECTION XIV - TRANSPORT INFORMATION

DOT SHIPPING INFORMATION

Proper Shipping Name: NON-HAZARDOUS BY DOT STANDARDS

Contains:

Hazard Class and Label:

Identification Number:

Packaging Group:

Other Shipping Info: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

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:

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

SARA TITLE III SECTION 311/312 HAZARD CATEGORIZATION:

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

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

CALIFORNIA PROPOSITION 65:

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

Safety Data Sheet

SECTION XVI - OTHER INFORMATION

HMIS Health:..... 1

HMIS Flammability:0

HMIS Reactivity:.....0

Additional:

Disclaimer: The information contained herein is accurate to the best of our knowledge. Adena Technologies makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.