Material Safety Data Sheet

SECTION 1 – IDENTIFICATION OF SUBSTANCE/PREPARATION AND COMPANY

Product Name: Acid Cleaner
Product Number: AP4161
Manufacturer/Supplier: Advanced Instruments, Inc.
Two Technology Way
Norwood, MA 02062
1-781-320-9000
Origin: USA
Date of Issue: 2013-04-09

Chemical Identification(s): 0.5 N Sulfuric Acid
Intended Use: The Acid Cleaner is used to clean the tubing/syringe system, of the Autoplate, if there is an accumulation of crystal violet dye or other substances in the tubing.

SECTION 2 – HAZARDS IDENTIFICATION

Health

Routes of Entry:
Eye, Skin, Ingestion, and Inhalation
Health Hazards:
May cause irreversible eye injury, skin irritation and possible burns, permanent damage to digestive tract, and respiratory tract irritation.
Carcinogenicity:
Suspected Human Carcinogen
Symptoms of Exposure:
Nosebleeds, nasal congestion, erosion of teeth, perforation of the nasal septum, cheat pain, bronchitis, etc.
Medical Conditions Aggravated by Exposure:
None indicated

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component:
0.5 N Sulfuric Acid
CAS #:
7664-93-9
Synonyms:
Hydrogen Sulfate, Oil of Vitriol
Percent:
~0.49%

Component:
Water
CAS #:
7732-18-5
Synonyms:
H_2O
Percent:
~99.5 %

SECTION 4 – FIRST AID MEASURES

Emergency and First Aid Procedures:
SEEK MEDICAL ASSISTANCE IN ALL CASES OF OVEREXPOSURE.
Eyes:
In case of contact, immediately flush eyes with copious amounts of water for at least 30 minutes.
Skin:
In case of contact, immediately wash skin with soap and copious amounts of water for at least 15 minutes..
Inhalation:
If inhaled, remove to fresh air and provide oxygen if needed.
Ingestion:
Do not induce vomiting. If conscious, give 2-4 cupfuls of milk or water.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point (ºF):
Not available
Flammable Limits:
LEL: Not available
UEL: Not available
Extinguishing Media:
Use water spray, carbon dioxide, and dry chemical powder. Most foams will react with the material and release corrosive/toxic gasses.
Fire Fighting Procedures:
Wear self-contained breathing apparatus and protective clothing.
Fire and Explosion Hazards:
Not considered a fire or explosion hazard.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill Response:
Wear suitable protective equipment listed under Section 8, Exposure Controls/Personal Protection. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if it can be done without risk. Clean up and place in closed container for proper disposal as described under, Section 13, Disposal Considerations. Comply with local, state, and country regulations on reporting releases. Refer to Section 15, Regulatory Information, for regulatory data.

SECTION 7 – HANDLING AND STORAGE

Keep container tightly closed. Do not get in eyes, on skin, or on clothing. Ensure good ventilation/exhaustion at the workplace. Store away from alkaline substances.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation, Respiratory Protection, Protective Clothing, Eye Protection:
Adequate ventilation is required. Protective gloves must be worn to prevent skin contact (Neoprene or equivalent). Safety glasses with side shields must be worn at all times.
Work/Hygienic Practices:
Wash hands thoroughly after handling. Do not take internally. Eyewash and safety equipment should be readily available.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Clear liquid

Boiling Point:

Not available

Specific Gravity (H_2O = 1):

>1.0

Melting Point (ºC):

Not available

Evaporation Rate (BuAc = 1):

Not available

Vapor Pressure (mm Hg):

Not available

Vapor Density (AIR = 1):

>1.0

Volatility:

Not available

Solubility in Water (%):

Not available

SECTION 10 – STABILITY AND REACTIVITY

Stability:
It is stable under normal temperatures and pressures. Sulfuric acid reacts vigorously, violently or explosively with many organic and inorganic chemicals and with water.
Conditions to Avoid:
Incompatible materials, metals, excess heat, combustible materials, organic materials, oxidizers, amines, bases
Materials to Avoid:
Metals, strong oxidizing agents, strong reducing agents, bases, chlorates, finely powdered metals, iron, nitrates, nitrites, perchlorates, permanganates, phosphorus, potassium chlorates, steel, zinc, hydrogen, peroxide, cesium acetylene carbide, cyanides, nitromethane, phosphorus trioxide, azides, iodides, benzene, carbides, fulminates, picrates, organic materials, mercuric amines, lithium silicides, trihydroxdiamino phosphate
Hazardous Decomposition:
Carbon monoxide, oxides of sulfur, carbon dioxide
Hazardous Polymerization:
Has not been reported
Additional Information:
None

SECTION 11 – TOXICOLOGICAL INFORMATION

Symptoms of Exposure:
Irritating on contact with skin, eyes, mucous membranes, or upper respiratory tract. Harmful if swallowed.
Medical Conditions Aggravated by Exposure:
None indicated.
Routes of Entry:
Inhalation, ingestion, or skin contact.
Carcinogenicity:
Suspected Human Carcinogen
Toxicity Data:
Not available
Toxicological Findings:
Not available

SECTION 12 – ECOLOGICAL INFORMATION

Ecological effects:
Not available
General notes:
See “Handbook of Environmental Fate and Exposure Data”

SECTION 13 – DISPOSAL CONSIDERATIONS

EPA Waste Numbers:
Not available
Treatment:
Specified Technology – Contact your local permitted waste disposal site (TSD) for permissible treatment sites. ALWAYS CONTACT A PERMITTED WASTE DISPOSAL SITE (TSD) TO ASSURE COMPLIANCE WITH ALL CURRENT LOCAL, STATE, AND COUNTRY REGULATIONS.

SECTION 14 – TRANSPORTATION INFORMATION

DOT Proper Shipping Name:
Sulfuric Acid
DOT ID Number:
Not regulated

SECTION 15 – REGULATORY INFORMATION

European Information:
European Labeling in Accordance with EC Directives
Reviews, Standards, and Regulations:
Not available

SECTION 16 – OTHER INFORMATION

Comments:
None
NFPA Hazard Ratings:
Health: 3
Flammability: 0
Reactivity: 1
Special Hazards: Not available