



Material Safety Data Sheet

Acidic Pyrocatechol Violet Dye solution

1. Product Identification

Synonyms: CA-6 Analyzer Aluminum Reagent #1

CAS No.: Not applicable to mixtures.

Molecular Weight: Not applicable to mixtures.

Chemical Formula: Not applicable to mixtures.

Product Codes: ECD P/N 2010046-1

Manufacture By: Electro-Chemical Devices, Inc.
1681 Kettering
Irvine, CA 92614

Phone: (800) 729-1333

2. Hazards Identification

Irritating to eyes, skin and respiratory system.

Emergency Overview



Hazard Pictograms:

OSHA Hazards

Target Organ Effect, Toxic by ingestion, Harmful by skin absorption, Skin sensitizer, Irritant, Carcinogen

Target Organs

Eyes, skin, mucous membranes, blood, central nervous system

GHS Classification

Corrosive to metals (Category 1)



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Acute toxicity, Oral (Category 3)

Acute toxicity, Dermal (Category 4)

Skin irritation (Category 2)

Eye irritation (Category 2A)

Skin sensitization (Category 1)

Carcinogenicity (Category 2)

Specific target organ toxicity - repeated exposure (Category 2)

Acute aquatic toxicity (Category 1)



NFPA Scale:

Potential Health Effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Skin Causes skin irritation.

Eyes Causes eye irritation.

Ingestion Toxic if swallowed.

3. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Hydroxylamine hydrochloride	5470-11-1	1.3%	Yes
Hydrochloric Acid, 37%	7647-01-1	>1%	Yes
1,10 Phenanthroline	66-71-7	>0.1%	Yes
Brij 35, 30%	9002-92-0	>0.1%	Yes
Pyrocatechol Violet	115-41-3	>0.02%	Yes
Formaldehyde, 40%	50-00-0	>0.01%	Yes
Water	7732-18-5	Balance	No



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4. First Aid Measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Place in labeled plastic containers for disposal, wash area down with water.

7. Handling and Storage



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Handling: Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage: Keep container tightly closed in a dry and well-ventilated place.

8. Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Immersion protection

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: > 480 min

Material tested: Dermatrill® (Aldrich Z677272, Size M)

Splash protection

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: > 30 min

Material tested: Dermatrill® (Aldrich Z677272, Size M)

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures



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Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance:

Clear, colorless liquid.

Odor:

Odorless.

Solubility:

Complete (100%)

Specific Gravity:

1.0

pH:

Acidic, pH < 2

% Volatiles by volume @ 21C (70F):

none

Boiling Point:

100°-102°C

Melting Point:

No information found.

Vapor Density (Air=1):

Not applicable.

Vapor Pressure (mm Hg):

Not applicable.

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.



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Hazardous Decomposition Products:

Hydrogen chloride gas, oxides of nitrogen, toxic and irritating vapors.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizing agents

Conditions to Avoid:

Incompatible materials, Strong oxidizing materials, phosphorous pentachloride, Calcium, Anhydrous copper (II) sulfate

11. Toxicological Information

Hydroxylamine Hydrochloride

CAS# 5470-11-1

Acute toxicity

Oral LD50

LD50 Oral - rat - 141 mg/kg

Remarks: Behavioral: Convulsions or effect on seizure threshold.

Inhalation LC50

no data available

Dermal LD50

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

May cause allergic skin reaction.

Germ cell mutagenicity

Genotoxicity in vitro - rat - Embryo



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Morphological transformation.

Genotoxicity in vitro - Hamster - Lungs

Sister chromatid exchange

Carcinogenicity

Suspected human carcinogens

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion Toxic if swallowed.

Skin Causes skin irritation.

Eyes Causes eye irritation.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.



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Synergistic effects

no data available

Additional Information

RTECS: NC3675000

Hydrochloric Acid

CAS# 7647-01-1

Acute toxicity

Oral LD50

no data available

Inhalation LC50

no data available

Dermal LD50

no data available

Other information on acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

Eyes: no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrochloric acid)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.



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Reproductive toxicity

no data available

Teratogenicity

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation

Ingestion: May be harmful if swallowed.

Skin: May be harmful if absorbed through skin. May cause skin irritation

Eyes: May cause eye irritation.

Synergistic effects: no data available

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

13. Disposal Considerations

Dilute with water and flush to sewer if local ordinances allow, otherwise, whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility.

Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.



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14. Transport Information

US DOT

Shipping Name: Hhydrochloric acid solution

Hazard Class: 8

UN Number: UN2796

Packing Group: PG II

15. Regulatory Information

OSHA Status: These items meet the OSHA Hazard Communication Standard (29 CFR 1910.1200) definition of a hazardous material.

TSCA Status: All components of this solution are listed on the TSCA Inventory or are mixtures (hydrates) of items listed on the TSCA Inventory.

Sara Title III:

Section 302 Extremely Hazardous Substances: Not Applicable.

Section 311/312 Hazardous Catagories: Acute: Yes Chronic, Fire, Pressure, Reactivity: No

Section 313 Toxic Chemicals: Not Applicable.

California: None Reported.

Pennsylvania: None Reported.

16. Other Information

NFPA Ratings: Health: **2** Flammability: 0 Reactivity: **2**

Label Hazard Warning:

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

Label Precautions:

None.

Label First Aid:

Not applicable.

Product Use:

Laboratory Reagent.



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Revision Information:

MSDS-2010046-1 rev. B Feb 2015
