



SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Issue Date: 5-4-05

Trade Name: **Developer Systems Cleaner Kit
(Parts A, B and Neutralizer)**

Chemical Name: Mixtures- Parts A, B, & Neutralizer

Synonyms: None

Formula: Mixture, see below.

Catalog Number: 28560-49

Manufacturer: CPAC Imaging Group
Norcross, GA 30093

Manufacturer's Telephone: (770) 448-0250

TRANSPORTATION EMERGENCIES (24 Hrs.): CHEMTREC (800) 424-9300
GENERAL INFORMATION : (770) 448-0250

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Part	Components	CAS Number	Weight % mg/m3	OSHA 8-Hour mg/m3	ACGIH TLV
<u>A</u>	Water	7732-18-5	95-99%	NE	NE
	Potassium Permanganate	7722-64-7	1-5%	5 mg/ m3 Ceiling, as Mn	0.2 mg/m3 as Mn
<u>B</u>	Water	7732-18-5	90-95%	NE	NE
	Sulfuric Acid	7664-93-9	5-10%	1 mg/m3	1 mg/m3, 3mg/m3 STEL
<u>Neutralizer</u>	Water	7732-18-5	70-75%	NE	NE
	Sodium Bisulfite	7631-90-5	20-25%	5 mg/m3	NE
	Citric Acid	77-92-9	1-5%	5 mg/m3	NE

NE = Not Established

SECTION 3 - HAZARDS IDENTIFICATION

Potential Health Effects

Skin:

Part A- Harmful if absorbed through the skin.

Part B- Warning! Causes skin burns.

Neutralizer- Low hazard when handled as recommended.

Eyes:

Part A- Contains Potassium Permanganate. Warning! Causes eye irritation.

Part B- Warning! Causes eye burns.

Neutralizer- Low hazard when handled as recommended.

Inhalation:

Part A- Harmful if inhaled. May cause damage to the mucous membranes and upper respiratory tract.

Part B- Harmful if inhaled. Mist or vapor extremely irritating to respiratory tract. Inhaling strong inorganic mists or vapors that contain sulfuric acid can cause cancer.

Neutralizer- Low hazard when handled as recommended.

Ingestion:

Part A- Harmful if swallowed.
Part B- Harmful if swallowed.
Neutralizer- Low hazard when handled as recommended.

Conditions aggravated by overexposure: Part A - May aggravate asthma.

Carcinogenicity: Refer to section 11 - Toxicological Information

SECTION 4-FIRST AID MEASURES

Eye Contact: Part A and Neutralizer
Flush eyes with plenty of water for at least 15 minutes occasionally lifting the upper and lower lids. Get medical attention.

Part B

Flush eyes with plenty of water for at least 15 minutes occasionally lifting the upper and lower lids. Get medical attention immediately.

Skin Contact: Part A

Immediately remove contaminated clothing and wash with soap and plenty of water. Get medical attention.

Part B

Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing. Get medical attention.

Neutralizer

Immediately remove contaminated clothing and wash with soap and plenty of water. If symptoms occur, get medical attention.

Inhalation: Parts A & B and Neutralizer

Remove victim to fresh air immediately. Get medical attention if symptoms persist.

Ingestion: Part A

Drink several glasses of water and seek medical attention. Never give anything by mouth to an unconscious person.

Part B

Do **NOT** induce vomiting. Have victim drink a glass of water. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Neutralizer

Drink one to two glasses of water. Get medical attention.

SECTION 5- FIRE FIGHTING MEASURES

Flammable Properties: Parts A & B and Neutralizer are non-flammable

Flash Point: Not applicable

Test Method: Not applicable

Lower Flammable Limit: Not applicable

Upper Flammable Limit: Not applicable

Autoignition Temp.: Not applicable

Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus. Fire or excessive heat may produce hazardous decomposition products - See Section 10.

Hazardous Combustion Products: None - Parts A, B, and Neutralizer.

SECTION 6- ACCIDENTAL RELEASE

For small incidental spills and leaks, wear chemical safety goggles, and appropriate protective gloves and apron. Follow OSHA regulations and NIOSH recommendations for respiratory protection (see 29 CFR 1910.134 and NIOSH pub. 87-108). Absorb spill with vermiculite or other inert material. Consult federal, state, and local regulations for proper disposal.

SECTION 7- HANDLING AND STORAGE

Handling: Part A: Avoid contact with skin, eyes, and clothing. Use with adequate ventilation. Wash thoroughly after use.
Part B: Avoid contact with skin, eyes, and clothing. Do not create mists or aerosols. Use with adequate ventilation. Wash thoroughly after use.
Neutralizer: Avoid contact with skin, eyes, and clothing. Use with adequate ventilation. Wash thoroughly after use.

Storage: Keep away from incompatibles. See section 10.

SECTION 8- PERSONAL PROTECTION

Respiratory Protection:

Parts A & Part B: Vent work area to ensure airborne concentrations are below the current occupational exposure limits, otherwise an approved acid gas respirator must be worn.

Neutralizer: None should be needed. Use in ventilated work area.

Eye Protection: Part A: Safety goggles. Part B: Safety goggles and a face shield. Neutralizer: Safety goggles.

Skin Protection: Part A, Part B, & Neutralizer: Wear chemical resistant gloves and appropriate clothing to prevent exposure.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

	<u>Part A</u>	<u>Part B</u>	<u>Neutralizer</u>
Form	Liquid	Liquid	Liquid
Color / Appearance:	Purple	Colorless	Colorless
Odor	Odorless	Odorless	Odorless
Specific Gravity:	1.01	1.05	1.25
Solubility in Water (20 C):	complete	complete	complete
pH:	9.5	< 1.0	5.7
Vapor Pressure at 20 C (68 F):	24 mbar (18 mm Hg)	24 mbar (18 mm Hg)	24 mbar (18 mm Hg)
Vapor Density:	0.6	0.6	0.6
Boiling Point	> 100 C	> 100 C	> 100 C
Volatile fraction by weight:	95-100%	90-95%	70-75%

SECTION 10- STABILITY / REACTIVITY

	<u>Part A</u>	<u>Part B</u>	<u>Neutralizer</u>
Stability:	Stable	Stable	Stable
Incompatibility:	Strong reducing agents Finely powdered metals Peroxides Aluminum Zinc Lead Copper	Bases	Strong acids
Hazardous Decomposition Products:	Nature of decomposition products not known	Sulfur dioxide	Sulfur dioxide
Hazardous Polymerization:	Will not occur	Will not occur	Will not occur

SECTION 11- TOXICOLOGICAL INFORMATION

EFFECTS OF EXPOSURE:

International Agency for Research on Cancer (IARC) has determined that occupational exposure to strong inorganic mists or vapors containing sulfuric acid is carcinogenic to humans. When used according to product mixing instructions for the recommended use, this product is not expected to generate mists or vapors.

Part A: Eye contact causes irritation. Exposure to skin may cause brown spots. If ingested, may cause irritation of gastrointestinal tract.

Part B: Eye and skin contact causes burns. Inhalation of mist or vapor causes irritation. If ingested, may cause burns to the gastrointestinal tract.

Neutralizer: May cause eye irritation. Inhalation or ingestion may cause hypersensitivity reactions in some individuals with asthma or sulfite sensitive individuals.

TARGET ORGANS:

Potassium Permanganate: Central Nervous System, Blood, Kidneys, Lungs

Pure Component Toxicology Information:

Potassium Permanganate:

Contact with eyes can cause eye damage. Inhalation of high concentrations of potassium permanganate dust or mist (solutions) may cause irritation of the nose, throat and respiratory tract with symptoms such as sore throat, coughing, shortness of breath and difficult breathing. Extreme exposures could result in a build-up of fluid in the lungs (pulmonary edema) that might be fatal in severe cases. Symptoms of pulmonary edema, such as difficult breathing, may not appear until several hours after the exposure. Chronic intake of manganese compounds by ingestion and inhalation can result in harmful effects on the central nervous system. Symptoms could include difficulty in walking, weakness or cramps in the legs, trouble with memory and judgement and unstable emotions.

Sulfuric Acid:

Corrosive to skin and eyes. Repeated exposure to low concentrations of mists or aerosols can cause dermatitis. Sulfuric acid is corrosive and can cause severe irritation or corrosive damage if inhaled. The degree and severity of respiratory effects are influenced by factors such as the physical state and particle size of the aerosol, deposition site, concentration and humidity. Inhalation of sulfuric acid can cause severe lung damage with a life-threatening accumulation of fluid (pulmonary edema). Inhaling strong inorganic mists or vapors that contain sulfuric acid can cause cancer. Ingestion causes burns to the mouth, throat, esophagus and stomach.

Sodium Bisulfite:

Concentrated solutions are irritating to skin, eyes and mucous membranes.

Citric Acid:

Inhalation of dusts and mists from solutions can probably cause temporary irritation of the nose and throat based on acidity. Skin contact probably causes mild to severe irritation depending upon the duration of exposure. Eye contact can cause severe irritation and corrosive injury based on animal information. Ingestion of large amounts may cause stomach pain and vomiting.

SECTION 12- DISPOSAL CONSIDERATIONS

Product should be disposed of in accordance with federal (40 CFR part 261), state and local regulations. Before attempting cleanup, refer to hazard information and protective measures (chemical gloves, etc.). Part B can be neutralized with lime or soda ash.

SECTION 13- ECOLOGICAL INFORMATION

Part B- Sulfuric Acid:

Aquatic Toxicity: 48-hour TLm, flounder: 100-300 ppm

SECTION 14- TRANSPORTATION INFORMATION

Regulated by U.S. Department of Transportation? Yes

Proper Shipping Name: Sulfuric Acid Solution

U.N. Identification Number: UN 2796

Hazard Class: 8

Packing Group: II

Limited Quantity Packaging: 1 Liter (33.8 ounces)

Label Required (Air shipments): Corrosive

Shipping Paper Description: Part B in Box Contains: Sulfuric Acid Solution, UN 2796, 8, PG II, "Ltd. Qty."

SECTION 15- REGULATORY INFORMATION

OSHA:

This product is subject to the Hazard Communication Rule, 29 CFR, 1910.1200.

SARA Title III:

The following ingredients are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) : Potassium Permanganate, Sulfuric Acid

EPA TSCA Requirements:

All ingredients comply with EPA TSCA requirements.

SECTION 16- OTHER INFORMATION

To the best of our knowledge, the information contained herein is accurate. However, CPAC Imaging Group does not assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.