

Section 1 Chemical Product and Company Identification

Product Identifier GPC® Calibrator
Product Number IR-CHE7340, IR-CHE7343, IR-CHE7344
General Use Additive for etching copper plates
Company Address UEI Systems®, a UEI Group Company
 9090 Nieman Road
 Overland Park, KS 66214 USA
Phone +1 800 221 9059 or +1 913 541 0503
Emergency Contact Number CHEMTREC – Available 24 hours/day, 7 days/week
 Domestic North America: +1 800 424 9300
 International: +1 703 527 3887

Section 2 Hazards Identification

GHS Classification

Hazard Class	Hazard Category	Route of Exposure
Acute Toxicity	4	Oral
Eye Damage/Eye Irritation	2A	–
Skin Sensitization	1	–

GHS Labeling
Contains

4-Methylaminophenol sulfate (55-55-0)



Warning

Hazard Statements

Harmful if swallowed
 May cause an allergic skin reaction
 Causes serious eye irritation

Precautionary Statements

Avoid breathing dust/fume/gas/mist/vapors/spray
 Wash skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Contaminated work clothing should not be allowed out of the workplace
 Wear protective gloves/ eye protection/ face protection

Response

if swallowed: Call a Poison Center or doctor/ physician if you feel unwell
if on skin: Wash with plenty of soap and water
if in eyes: Rinse cautiously with water for several minutes.
 Remove contact lenses, if present and easy to do. Continue rinsing.
 Specific treatment (see supplemental first aid instructions on this label)
 Rinse mouth
If skin irritation or rash occurs: Get medical advice/ attention
If eye irritation persists: Get medical advice/ attention
 Wash contaminated clothing before reuse

Section 2 Hazards Identification, continued

- Storage** Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations

Section 3 Hazardous Ingredients / Identity Information

Hazardous Components	CAS No.	%	OSHA (PEL/TWA)	ACGIH TLV
4-Methylaminophenol sulfate	55-55-0	Proprietary 0–100%	–	–

Section 4 First Aid Measures

- In all cases, call a physician immediately. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.**
- Ingestion** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
 - Inhalation** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
 - Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
 - Skin Contact** Wash off with soap and plenty of water. Consult a physician.

Section 5 Firefighting Measures

- Extinguishing Media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
- Flammable/Combustible Properties** Carbon Oxides, Nitrogen Oxides (NOx), Sulphur Oxides
- Firefighting Equipment/Instructions** Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 Accidental Release Measures

- Personal Precautions** Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
- Environmental Precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- Methods for Cleaning Up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7 Handling and Storage

- Handling Precautions** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
- Storage Requirements** Keep container tightly closed in a dry and well-ventilated place.

Section 8 Component Exposure Limits

Components with Workplace Control Parameters	Contains no substances with occupational exposure limit values
Appropriate Engineering Controls	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal Respiratory Protection	Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator.
Personal Hand Protection	Handle with gloves
Eye Protection	Use face shield and safety glasses
Skin 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.

Section 9 Physical and Chemical Properties

Appearance/Odor	Crystalline beige/no data	Odor Threshold	No data available
pH	No data available	Boiling Point	No data available
Melting Point	260° C (500° F)	Solubility (H₂O)	No data available
Specific Gravity	Solid material	Density	No data available
Octanol/H₂O Coefficient	No data available	Evaporation Rate	No data available
Molecular Weight	No data available	Decomposition Temperature	No data available
Auto Ignition	No data available	Lower Flammability Limit	No data available
Flash Point	No data available	Upper Flammability Limit	No data available
Vapor Density	No data available	Vapor Pressure	No data available
VOC	No data available	Flammability Class	No data available
Viscosity	No data available		

Section 10 Chemical Stability and Reactivity

Stability	Stable under recommended storage conditions
Conditions to Avoid	Light
Incompatibility	Acids, acid chlorides, acid anhydrides, oxidizing agents
Hazardous Decomposition/By-Products	No data available
Hazardous Polymerization	No data available

Section 11 Toxicological Information

Acute toxicity	
Acute Oral LD50	565 mg/kg (mouse)
Acute Dermal LD50	No data available
Acute Inhalation LC50	No data available
Serious Eye Damage/Eye Irritation	Irritating to eyes, respiratory system and skin
Carcinogenicity	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, NTP or OSHA.
Target Organ Effects	No data available
Reproductive Toxicity	No data available
Teratogenicity	No data available

Section 12 Ecological Information

Ecotoxicity	
Acute Aquatic Toxicity	Category 1
Chronic Aquatic Toxicity	Category 1
	No data available
Persistence/Degradability	No data available
Bioaccumulative Potential	No data available
Mobility in Soil	No data available

Section 13 Disposal Considerations

Disposal Instructions	Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste.
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Section 14 Transportation Information

DOT (US)		IMDG		IATA	
UN number	3077	UN number	3077	UN number	3077
Class	9	Class	9	Class	9
Packing group	III	Packing group	III	Packing group	III
Proper shipping name	Environmentally Hazardous Substance, Solid, N.O.S. (Bis [4-hydroxy-N-methylanilinium] sulphate)	EMS-No	F-A, S-F	Proper shipping name	Environmentally Hazardous Substance, Solid, N.O.S. (Bis [4-hydroxy-N-methylanilinium] sulphate)
Reportable Quantity (RQ)	No	Proper shipping name	Environmentally Hazardous Substance, Solid, N.O.S. (Bis [4-hydroxy-N-methylanilinium] sulphate)	Special Provision A197:	These substances when transported in single or combination packaging containing a NET mass of 5KG of Solid material or less for solids, are not subject to any other provisions of these regulations provided the packaging meets the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8
Marine pollutant	Yes	Marine pollutant	Yes		
Poison Inhalation Hazard	No				

Section 15 Regulatory Information

SARA 302 Components

SARA 302 No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313 This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313:

SARA 311/312 Hazards Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

<u>Right To Know Components</u>	<u>CAS-No</u>	<u>Revision Date</u>
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Pennsylvania	Bis(4 -hydroxy -N-methylanilinium) sulphate	55-55-0	-
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New Jersey	Bis(4 -hydroxy -N-methylanilinium) sulphate	55-55-0	-
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California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

Section 16 Other Information

UEI Systems® provides the information contained herein in good faith. It is believed to be correct. However it is not all-inclusive and should be used only as a guide. Individuals receiving this information must exercise their independent judgement in determining its appropriateness for a particular purpose. UEI Systems shall not be held liable for any damage resulting from handling or from contact with this product. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources.

Abbreviations **PEL** Permissible Exposure Limit
TLV Threshold Limit Value

End Notes

1. SARA - Signed into law in 1986, the Superfund Amendments and Reauthorization Act (SARA) is an extension of CERCLA, and is intended to encourage and support local and state emergency planning efforts. SARA provides citizens and local governments with information about potential chemical hazards, and calls for facilities that store hazardous materials to provide officials and citizens with data on the type and amount on hand at specific locations. This field states whether a material is listed or not listed in section 372.65 of SARA. EHS - This states if a material is listed or not listed in Appendix B to part 355, the SARA Extremely Hazardous Substances (EHS) section. RQ is the reportable quantity. TPQ is the Threshold Planning Quantity.
2. RCRA - The Resource Conservation and Recovery Act enacted in 1976 and subsequently amended, controls solid-waste disposal and encourages recycling. This states whether a material is listed or not listed under this regulation. If listed the Hazardous Waste Number and waste characterization assigned by RCRA is also provided.
3. CERCLA - Enacted in 1980 and amended thereafter, the Comprehensive Environmental Response, Compensation, and Liability Act provides for identification and cleanup of hazardous materials released on land, into the air, waterways, and groundwater. It covers areas affected by newly released materials and older leaking or abandoned dump sites. This states whether a material is listed or not listed in CERCLA Table 302.4. If listed the section(s) that it is listed under and the Reportable Quantity (RQ) are also provided.
4. TSCA - The Toxic Substances Control Act controls the exposure to and use of raw industrial chemicals not subject to other laws. This states whether the chemical is listed or not listed under this regulation.

Evidence <https://ntp.niehs.nih.gov/ntp/roc/content/profiles/ethylenethiourea.pdf>
<http://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?./temp/~5zDWnc:1>

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