

# SAFETY DATA SHEET

Revision: 1.0 Date: 07.03.2013

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH),  
1272/2008 (CLP) & 453/2010



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## M-Prep Neutralizer 5A

### 1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<b>1.1 Product identifier</b>	
Product Name	M-Prep Neutralizer 5A
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.
<b>1.2 Recommended use of the chemical and restrictions on use</b>	
Identified Use(s)	PC14 Metal surface treatment products, including galvanic and electroplating products
Uses Advised Against	None known.
<b>1.3 Supplier's details</b>	
Company Identification	VISHAY MEASUREMENTS GROUP, INC. Post Office Box 27777 Raleigh, NC 27611 United States of America
Telephone	1-919-365-3800
E-Mail (competent person)	mm.us@vishaypg.com
<b>1.4 Emergency Phone No.</b>	1-800-424-9300 (US) 1-703-527-3887 (Outside US) CHEMTREC

### 2. SECTION 2: HAZARDS IDENTIFICATION

<b>2.1 Classification of the substance or mixture</b>	
Directive 67/548/EEC & Directive 1999/45/EC	Xi;R36/38
<b>2.2 Label elements</b>	
Product Name	According to Directive 67/548/EEC & Directive 1999/45/EC M-Prep Neutralizer 5A
Hazard Symbol	 Xi
Risk Phrases	Xi; R36/38: Irritating to eyes and skin.
Safety Phrases	S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S27/28: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of: water and soap. S36/37/39: Wear suitable protective clothing, gloves and eye/face protection. S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>2.3 Other hazards</b>	None.

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## 3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Substances in preparations / mixtures

3.2 Mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of the substance	%W/W	CAS No.	EC No.	Hazard Statement(s)
Ammonium Hydroxide	<0.02	1336-21-6	215-647-6	Skin Corr. 1B; H314 Aquatic Acute 1; H400
Trisodium Phosphate	<0.05	10101-89-0	-	Skin Irrit. 2; H315 Eye Irrit. 2; H319
Sodium Tetraborate Pentahydrate	<0.01	12179-04-3	215-540-4	Repr. 1B; H360FD
Distilled Water	>99.9	7732-18-5	231-791-2	Not classified

Directive 67/548/EEC & Directive 1999/45/EC

Chemical identity of the substance	%W/W	CAS No.	EC No.	EC Classification and Risk Phrases Hazard Statement(s)
Ammonium Hydroxide	<0.02	1336-21-6	215-647-6	C; R34: Causes burns. R50: Very toxic to aquatic organisms.
Trisodium Phosphate	<0.05	10101-89-0	-	Xi; R36/38: Irritating to eyes and skin.
Sodium Tetraborate Pentahydrate	<0.01	12179-04-3	215-540-4	Repr. Cat 2; R60: May impair fertility. R61: May cause harm to the unborn child.
Distilled Water	>99.9	7732-18-5	231-791-2	Not classified

## 4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.

Skin Contact

IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

Eye Contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Get medical advice/attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Causes irritation to eyes and skin.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

## 5. SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media

Non-flammable, As appropriate for surrounding fire.

Unsuitable extinguishing Media

None known.

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- |            |  |   |
|------------|--|---|
| <b>5.2</b> | <b>Special hazards arising from the substance or mixture</b> | When heated, material will emit anhydrous ammonia vapor which necessitates respiratory and eye protection for firefighting.   |
| <b>5.3</b> | <b>Advice for fire-fighters</b>                              | Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers. |

## 6. SECTION 6: ACCIDENTAL RELEASE MEASURES

- |            |  |   |
|------------|--|---|
| <b>6.1</b> | <b>Personal precautions, protective equipment and emergency procedures</b> | Ensure adequate ventilation. Avoid breathing vapours. Wear protective gloves/protective clothing/eye protection/face protection.                        |
| <b>6.2</b> | <b>Environmental precautions</b>   | Do not allow to enter drains, sewers or watercourses.   |
| <b>6.3</b> | <b>Methods and material for containment and cleaning up</b>                | Absorb spillage to prevent material damage. Cover spills with inert absorbent material. Neutralize with dilute acid. Wash the spillage area with water. |
| <b>6.4</b> | <b>Reference to other sections</b>   | See Section: 8, 13  |

## 7. SECTION 7: HANDLING AND STORAGE

- |            |   |  |
|------------|---|--|
| <b>7.1</b> | <b>Precautions for safe handling</b>                                | Ensure adequate ventilation. Do not breathe vapour. In case of inadequate ventilation wear respiratory protection. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. |
| <b>7.2</b> | <b>Conditions for safe storage, including any incompatibilities</b> | Store in a cool/low-temperature, well-ventilated (dry) place. Keep container closed.   |
|            | Storage temperature   | Ambient. <27°C.  |
|            | Storage life  | Stable under normal conditions.  |
|            | Incompatible materials  | None known.  |
| <b>7.3</b> | <b>Specific end use(s)</b>  | PC14 Metal surface treatment products, including galvanic and electroplating products  |

## 8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- |              |  |   |
|--------------|--|---|
| <b>8.1</b>   | <b>Control parameters</b>  |   |
| <b>8.1.1</b> | <b>Occupational Exposure Limits</b>  | Not established.  |
| <b>8.1.2</b> | <b>Biological limit value</b>  | Not established.  |
| <b>8.1.3</b> | <b>PNECs and DNELs</b>   | Not established.  |
| <b>8.2</b>   | <b>Exposure controls</b>   |   |
| <b>8.2.1</b> | <b>Appropriate engineering controls</b>  | Ensure adequate ventilation.  |
| <b>8.2.2</b> | <b>Individual protection measures, such as personal protective equipment (PPE)</b> | Use personal protective equipment as required. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Have available eyewash bottle with clean water. |

Eye/face protection



Wear goggles giving complete protection to eyes to protect against liquid splashes (EN166).

Skin protection



Wear impervious gloves (EN374). Neoprene / Rubber Gloves. Breakthrough time of the glove material: refer to the information provided by the gloves' producer.

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Respiratory protection



Normally no personal respiratory protection is necessary. In case of inadequate ventilation wear respiratory protection.

Thermal hazards

None anticipated.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

## 9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Colourless Liquid
Odour	Mild ammonia odor
Odour Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	0°C
Initial boiling point and boiling range	760 mmHg @ 100°C
Flash Point	Not applicable.
Evaporation Rate	<1 (BuAc = 1)
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	100°C
Vapour density	1 (Air = 1)
Relative density	1 (Water = 1)
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not established.
Auto-ignition temperature	480°C (EU Method A.15)
Decomposition Temperature	Not established.
Viscosity	Not established.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

### 9.2 Other information

None.

## 10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Stable under normal conditions.
10.4 Conditions to avoid	Adding Sodium Hydroxide to this material and/or heating will volatilize Ammonia.
10.5 Incompatible materials	Acids, Peroxides, metallic copper, Tin, Zinc, and their alloys, halogenated compounds
10.6 Hazardous decomposition product(s)	May decompose in a fire giving off toxic fumes.

## 11. SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects (Substances in preparations / mixtures)

#### Acute toxicity

Ingestion	Not classified
Inhalation	Not classified
Skin Contact	Causes skin irritation.
Eye Contact	Causes eye irritation.
Irritation	Skin Irrit. 2 / Eye Irrit. 2
Corrosivity	Not classified.
Sensitisation	Not classified.
Repeated dose toxicity	Not classified.

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	<b>Carcinogenicity</b>	No evidence of carcinogenicity.
	<b>Mutagenicity</b>	There is no evidence of mutagenic potential.
	<b>Toxicity for reproduction</b>	No data.
11.2	<b>Other information</b>	None.

## 12. SECTION 12: ECOLOGICAL INFORMATION

12.1	<b>Toxicity</b>	Not classified as a Marine Pollutant.
12.2	<b>Persistence and degradability</b>	Readily biodegradable.
12.3	<b>Bioaccumulative potential</b>	The product has no potential for bioaccumulation.
12.4	<b>Mobility in soil</b>	The product is predicted to have high mobility in soil. Soluble in water.
12.5	<b>Results of PBT and VPvB assessment</b>	Not classified as PBT or vPvB.
12.6	<b>Other adverse effects</b>	None known.

## 13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	<b>Waste treatment methods</b>	Neutralize absorbent material with dilute acid. Dispose of contents in accordance with local, state or national legislation.
13.2	<b>Additional Information</b>	None.

## 14. SECTION 14: TRANSPORT INFORMATION

		<b>ADR/RID / IMDG / IATA</b>
14.1	<b>UN number</b>	Not classified as dangerous for transport.
14.2	<b>Proper Shipping Name</b>	Not classified
14.3	<b>Transport hazard class(es)</b>	Not classified
14.4	<b>Packing group</b>	Not classified
14.5	<b>Environmental hazards</b>	Not classified as a Marine Pollutant. / Environmentally hazardous substance
14.6	<b>Special precautions for user</b>	Not classified
14.7	<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not classified
14.8	<b>Additional Information</b>	None.

## 15. SECTION 15: REGULATORY INFORMATION

15.1	<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
15.1.1	<b>EU regulations</b>	
	Authorisations and/or Restrictions On Use	None.
15.1.2	<b>National regulations</b>	None known.
15.2	<b>Chemical Safety Assessment</b>	Not available.

## 16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

**References:** Existing Safety Data Sheet (SDS), Harmonised Classification(s) for Ammonium Hydroxide (CAS# 1336-21-6), Sodium Tetraborate Pentahydrate (CAS#12179-04-3) and the Classification and Labelling Inventory for Trisodium Phosphate (CAS# 10101-89-0).

### LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	vPvT: very Persistent and very Toxic

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Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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## Annex to the extended Safety Data Sheet (eSDS)

No information available.