

SAFETY DATA SHEET

Revision: 1.1 Date: 08.04.2015

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

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

1.1 Product identifier

Product Name	M-Prep Neutraliser 5A
Chemical Name	Mixture
CAS No.	Mixture
EINECS No.	Mixture
REACH Registration No.	None assigned.

1.2 Recommended use of the chemical and restrictions on use

Identified Use(s)	PC14 Metal surface treatment products, including galvanic and electroplating products
Uses Advised Against	None known.

1.3 Supplier's details

Company Identification	VISHAY MEASUREMENTS GROUP, INC. Post Office Box 27777 Raleigh, NC 27611 USA
Telephone	919-365-3800
Fax	919-365-3945
E-Mail (competent person)	mm.us@vishaypg.com

1.4 Emergency Phone No.

1-800-424-9300
CHEMTREC

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1 GHS Classification

Not classified as dangerous for supply/use.

2.2 Label elements

Product Name	M-Prep Neutralizer 5A
Hazard Pictogram(s)	None assigned.
Signal Word(s)	None assigned.
Hazard Statement(s)	None assigned.
Precautionary Statement(s)	None assigned.
Additional Information	None.

2.3 Other hazards

None.

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3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

GHS Classification

Chemical identity of the substance	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
Ammonium hydroxide	< 0.02	1336-21-6	215-647-6	None assigned	Skin Corr. 1B; H314 STOT SE 3; H335 Aquatic Acute 1; H400
Sodium tetraborate pentahydrate	< 0.01	12179-04-3	215-540-4	None assigned	Eye Dam. 1; H318 Repr. 1B; H360FD SCL \geq 6.5%

H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage. H335: May cause respiratory irritation. H360FD: May damage fertility. May damage the unborn child. H400: Very toxic to aquatic life. SCL: Specific Concentration Limit.

4. SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Skin Contact

Wash with plenty of water. If irritation (redness, rash, blistering) develops, get medical attention.

Eye Contact

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

Rinse mouth. Do not induce vomiting. If symptoms develop, obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media

Non-flammable. As appropriate for surrounding fire.

Unsuitable extinguishing media

None known.

5.2 Special hazards arising from the substance or mixture

May decompose in a fire giving off toxic fumes. When heated, material will emit anhydrous ammonia vapor which necessitates respiratory and eye protection for firefighting.

5.3 Advice for fire-fighters

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

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required. See Section: 8. Avoid breathing vapours.

6.2 Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up

Absorb spillage to prevent material damage. Cover spills with inert absorbent material. Neutralize with dilute acid. Ventilate the area and wash spill site after material pick-up is complete.

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6.4 Reference to other sections

See Section: 8, 13

7. SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling**
Do not breathe vapour. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.
- 7.2 Conditions for safe storage, including any incompatibilities**
Storage temperature: Ambient. <27°C.
Storage life: Stable under normal conditions.
Incompatible materials: Acids, Peroxides, metallic copper, Tin, Zinc and their alloys, halogenated compounds.
- 7.3 Specific end use(s)**
PC14 Metal surface treatment products, including galvanic and electroplating products. See Section: 1.2

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Sodium Tetraborate Pentahydrate	12179-04-3	-	1	-	-	NIOSH

Note: National Institute for Occupational Safety and Health

8.1.2 Biological limit value

Not established.

8.1.3 PNECs and DNELs

Not established.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure adequate ventilation. or Use appropriate containment.

8.2.2 Individual protection measures, such as personal protective equipment (PPE)

General hygiene measures for the handling of chemicals are applicable. Avoid contact with skin, eyes or clothing. Do not breathe vapour. Wash hands before breaks and after work. Keep work clothes separately. Contaminated clothing should be thoroughly cleaned. Do not eat, drink or smoke at the work place.

Eye/ face protection



Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

Skin protection



Hand protection: Wear impervious gloves (EN374). Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Neoprene or rubber gloves are recommended.

Respiratory protection



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

Thermal hazards

Not applicable.

8.2.3 Environmental Exposure Controls

Avoid release to the environment.

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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	100°C
Flash point	Not applicable.
Evaporation rate	<1 (BuAc = 1)
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	760 mmHg @ 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	Not established.
Decomposition Temperature	Not established.
Viscosity	Not established.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2 Other information VOC: 0%

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Stability and reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	Hazardous polymerisation will not occur.
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. When heated, material will emit anhydrous ammonia vapor which necessitates respiratory and eye protection for firefighting.

11. SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity

Ingestion

Based upon the available data, the classification criteria are not met.
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.

Inhalation

Based upon the available data, the classification criteria are not met.
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20.0 mg/l.

Skin Contact

Based upon the available data, the classification criteria are not met.
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.

Skin corrosion/irritation

Based upon the available data, the classification criteria are not met.

Serious eye damage/irritation

Based upon the available data, the classification criteria are not met.

Respiratory or skin sensitization

Based upon the available data, the classification criteria are not met.

Germ cell mutagenicity

Based upon the available data, the classification criteria are not met.

Carcinogenicity

Based upon the available data, the classification criteria are not met.

Reproductive toxicity

Based upon the available data, the classification criteria are not met.

STOT - single exposure

Based upon the available data, the classification criteria are not met.

STOT - repeated exposure

Based upon the available data, the classification criteria are not met.

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11.2	Aspiration hazard Other information	Based upon the available data, the classification criteria are not met. None.
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12. SECTION 12: ECOLOGICAL INFORMATION

12.1	Toxicity	Based upon the available data, the classification criteria are not met. Estimated Mixture LC50 >100 mg/l (Fish)
12.2	Persistence and degradability	Readily biodegradable.
12.3	Bioaccumulative potential	The product has no potential for bioaccumulation.
12.4	Mobility in soil	The product is predicted to have high mobility in soil. Soluble in water.
12.5	Results of PBT and vPvB assessment	Not classified as PBT or vPvB.
12.6	Other adverse effects	None known.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods	Neutralize absorbent material with dilute acid.
13.2	Additional Information	Dispose of contents in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

	ADR/RID / IMDG / IATA	
14.1	UN number	Not classified as dangerous for transport.
14.2	Proper Shipping Name	Not classified
14.3	Transport hazard class(es)	Not classified
14.4	Packing group	Not classified
14.5	Environmental hazards	Not classified as a Marine Pollutant. / Environmentally hazardous substance
14.6	Special precautions for user	Not applicable.
14.7	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
14.8	Additional Information	None.

15. SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1	EU regulations SVHCs Germany	Sodium tetraborate pentahydrate (CAS No. 12179-04-3) Water hazard class: Not classified
15.1.2	National regulations USA	NTP: Not listed IARC Monographs: Not listed OSHA List of Highly Hazardous Chemicals, Toxics and Reactives: Ammonium hydroxide - Threshold Quantity (TQ) = 15000 lbs
15.2	Chemical Safety Assessment	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 No. 1336-21-6) and the Classification and Labelling Inventory for Sodium tetraborate pentahydrate (CAS No. 12179-04-3).

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
DNEL	Derived No Effect Level

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PNEC	Predicted No Effect Concentration
PBT	PBT: Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Bioaccumulative

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.