

Safety Data Sheet



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1. Identification

Product Name: METAL EFFECTS PRIMER 8.OZ **Revision Date:** 8/19/2015

Product Identifier: 301602 **Supersedes Date:** New SDS

Product Use/Class: Primer/Waterborne Acrylic

Supplier: Modern Masters, Inc.
9380 San Fernando Road
Sun Valley, CA 91352
USA **Manufacturer:** Modern Masters, Inc.
9380 San Fernando Road
Sun Valley, CA 91352
USA

Preparer: Regulatory Department

Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word

Danger

GHS HAZARD STATEMENTS

Carcinogenicity, category 1B H350 May cause cancer. Classified as carcinogenic Category 1 on the basis of epidemiological and/or animal data. Mixtures are classified as carcinogenic when at least 1 ingredient has been classified as carcinogenic and is present at 0.1% or above. Routes of exposure are dependent on ingredient form.

GHS LABEL PRECAUTIONARY STATEMENTS

P201 Obtain special instructions before use.
P281 Use personal protective equipment as required.
P308+P313 IF exposed or concerned: Get medical advice/attention.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

| <u>Chemical Name</u> | <u>CAS-No.</u> | <u>Wt.% Range</u> | <u>GHS Symbols</u> | <u>GHS Statements</u> |
|----------------------------|----------------|-------------------|--------------------|-----------------------|
| Iron Oxide | 1309-37-1 | 2.5-10 | No Information | No Information |
| Kaolin Clay | 1332-58-7 | 1.0-2.5 | No Information | No Information |
| Limestone | 1317-65-3 | 1.0-2.5 | No Information | No Information |
| Hydrous Magnesium Silicate | 14807-96-6 | 1.0-2.5 | No Information | No Information |
| Ester Alcohol | 25265-77-4 | 1.0-2.5 | No Information | No Information |

| | | | | |
|--|------------|---------|----------------|----------------|
| Urea | 57-13-6 | 1.0-2.5 | No Information | No Information |
| Distillates (Petroleum) Solvent-Dewaxed Heavy Paraffinic | 64742-65-0 | 0.1-1.0 | GHS08 | H350 |
| Amorphous Silica | 7631-86-9 | 0.1-1.0 | GHS06 | H331 |
| Ammonia | 7664-41-7 | 0.1-1.0 | GHS05-GHS06 | H302-314-331 |

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, rinse mouth with water. If feeling unwell, get medical attention. Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

| Chemical Name | CAS-No. | Weight % Less Than | ACGIH TLV- TWA | ACGIH TLV- STEL | OSHA PEL-TWA | OSHA PEL- CEILING |
|--|------------|-----------------------|-------------------|--------------------|--------------|----------------------|
| Iron Oxide | 1309-37-1 | 5.0 | 5 mg/m3 | N.E. | 10 mg/m3 | N.E. |
| Kaolin Clay | 1332-58-7 | 5.0 | 2 mg/m3 | N.E. | 15 mg/m3 | N.E. |
| Limestone | 1317-65-3 | 5.0 | N.E. | N.E. | 15 mg/m3 | N.E. |
| Hydrous Magnesium Silicate | 14807-96-6 | 5.0 | 2 mg/m3 | N.E. | N.E. | N.E. |
| Ester Alcohol | 25265-77-4 | 5.0 | N.E. | N.E. | N.E. | N.E. |
| Urea | 57-13-6 | 5.0 | N.E. | N.E. | N.E. | N.E. |
| Distillates (Petroleum) Solvent-Dewaxed Heavy Paraffinic | 64742-65-0 | 1.0 | N.E. | N.E. | N.E. | N.E. |
| Amorphous Silica | 7631-86-9 | 1.0 | N.E. | N.E. | N.E. | N.E. |
| Ammonia | 7664-41-7 | 1.0 | 25 ppm | 35 ppm | 50 ppm | N.E. |

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

| | | | |
|---------------------------------|-----------------------------|---|-----------|
| Appearance: | Liquid | Physical State: | Liquid |
| Odor: | Mild | Odor Threshold: | N.E. |
| Relative Density: | 1.253 | pH: | N.A. |
| Freeze Point, °C: | N.D. | Viscosity: | N.D. |
| Solubility in Water: | Miscible | Partition Coefficient, n-octanol/ water: | N.D. |
| Decomposition Temp., °C: | N.D. | Explosive Limits, vol%: | 0.6 - 4.2 |
| Boiling Range, °C: | 100 - 537 | Flash Point, °C: | 94 |
| Flammability: | Does not Support Combustion | Auto-ignition Temp., °C: | N.D. |
| Evaporation Rate: | Slower than Ether | Vapor Pressure: | N.D. |
| Vapor Density: | Heavier than Air | | |

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalis.

HAZARDOUS DECOMPOSITION: When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|----------------------|------------------|--------------------|-------------------|
| 1309-37-1 | Iron Oxide | >10000 mg/kg Rat | N.I. | N.I. |
| 25265-77-4 | Ester Alcohol | 3200 mg/kg Rat | >15200 mg/kg Rat | N.I. |
| 7631-86-9 | Amorphous Silica | >5000 mg/kg Rat | >2000 mg/kg Rabbit | >2.2 mg/L Rat |
| 7664-41-7 | Ammonia | 350 mg/kg Rat | N.I. | N.I. |

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

| | <u>Domestic (USDOT)</u> | <u>International (IMDG)</u> | <u>Air (IATA)</u> | <u>TDG (Canada)</u> |
|-----------------------|-------------------------|-----------------------------|-------------------|---------------------|
| UN Number: | N.A. | N.A. | N.A. | N.A. |
| Proper Shipping Name: | Not Regulated | Not Regulated | Not Regulated | Not Regulated |
| Hazard Class: | N.A. | N.A. | N.A. | N.A. |
| Packing Group: | N.A. | N.A. | N.A. | N.A. |
| Limited Quantity: | No | No | No | No |

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| Ammonia | 7664-41-7 |

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|-----------------------------|----------------|
| Methyl-4-Isothiazolin-3-one | 2682-20-4 |

16. Other Information

HMIS RATINGS

Health: 2* Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 1 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 57

SDS REVISION DATE: 8/19/2015

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Safety Data Sheet



www.modernmasters.com

1. Identification

Product Name: METAL EFFECTS COPPER 8.OZ
Product Identifier: 301709
Product Use/Class: Waterbased reactive paint
Supplier: Modern Masters, Inc.
 9380 San Fernando Road
 Sun Valley, CA 91352
 USA
Manufacturer: Modern Masters, Inc.
 9380 San Fernando Road
 Sun Valley, CA 91352
 USA
Preparer: Regulatory Department
Emergency Telephone: 24 Hour Hotline: 847-367-7700
Revision Date: 8/18/2015
Supersedes Date: New SDS

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

| <u>Chemical Name</u> | <u>CAS-No.</u> | <u>Wt.% Range</u> | <u>GHS Symbols</u> | <u>GHS Statements</u> |
|-------------------------|----------------|-------------------|--------------------|-----------------------|
| Copper | 7440-50-8 | 10-25 | No Information | No Information |
| Amorphous Silica | 7631-86-9 | 0.1-1.0 | GHS06 | H331 |
| Vinyl Acetate | 108-05-4 | 0.1-1.0 | GHS02-GHS07-GHS08 | H225-332-335-351 |
| 4.4 dimethyloxazolidine | 51200-87-4 | <0.1 | No Information | No Information |

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, rinse mouth with water. If feeling unwell, get medical attention. Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

| Chemical Name | CAS-No. | Weight % Less Than | ACGIH TLV- TWA | ACGIH TLV- STEL | OSHA PEL-TWA | OSHA PEL- CEILING |
|--------------------------|------------|-----------------------|-------------------|--------------------|--------------|----------------------|
| Copper | 7440-50-8 | 20.0 | 0.2 mg/m3 | N.E. | 0.1 mg/m3 | N.E. |
| Amorphous Silica | 7631-86-9 | 1.0 | N.E. | N.E. | N.E. | N.E. |
| Vinyl Acetate | 108-05-4 | 1.0 | 10 ppm | 15 ppm | N.E. | N.E. |
| 4.4 dimethylloxazolidine | 51200-87-4 | 0.1 | N.E. | N.E. | N.E. | N.E. |

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

| | | | |
|---------------------------------|-----------------------------|---|----------------|
| Appearance: | Liquid | Physical State: | Liquid |
| Odor: | Mild | Odor Threshold: | N.E. |
| Relative Density: | 1.213 | pH: | N.A. |
| Freeze Point, °C: | N.D. | Viscosity: | No Information |
| Solubility in Water: | Miscible | Partition Coefficient, n-octanol/ water: | N.D. |
| Decomposition Temp., °C: | N.D. | Explosive Limits, vol%: | N.A. - N.A. |
| Boiling Range, °C: | 100 - 100 | Flash Point, °C: | 100 |
| Flammability: | Does not Support Combustion | Auto-ignition Temp., °C: | N.D. |
| Evaporation Rate: | Slower than Ether | Vapor Pressure: | N.D. |
| Vapor Density: | Heavier than Air | | |

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Contains residual amounts of vinyl acetate. IARC list vinyl acetate as a possible human carcinogen (Group 2B). This means there is inadequate evidence of carcinogenicity of vinyl acetate in humans and limited evidence of vinyl acetate in experimental animals. Risk of cancer depends on duration and exposure and actual concentration of vinyl acetate in the formula.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|----------------------|------------------|--------------------|-------------------|
| 7631-86-9 | Amorphous Silica | >5000 mg/kg Rat | >2000 mg/kg Rabbit | >2.2 mg/L Rat |
| 108-05-4 | Vinyl Acetate | 2920 mg/kg Rat | 2320 mg/kg Rabbit | 11.4 mg/L Rat |

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

| | <u>Domestic (USDOT)</u> | <u>International (IMDG)</u> | <u>Air (IATA)</u> | <u>TDG (Canada)</u> |
|-----------------------|-------------------------|-----------------------------|-------------------|---------------------|
| UN Number: | N.A. | N.A. | N.A. | N.A. |
| Proper Shipping Name: | Not Regulated | Not Regulated | Not Regulated | Not Regulated |
| Hazard Class: | N.A. | N.A. | N.A. | N.A. |
| Packing Group: | N.A. | N.A. | N.A. | N.A. |
| Limited Quantity: | No | No | No | No |

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Pressure Hazard, Reactive Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| Copper | 7440-50-8 |
| Vinyl Acetate | 108-05-4 |

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

| <u>Chemical Name</u> | <u>CAS-No.</u> |
|----------------------|----------------|
| Acetaldehyde | 75-07-0 |

16. Other Information

HMIS RATINGS

Health: 2* Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 1 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 49

SDS REVISION DATE: 8/18/2015

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.

Safety Data Sheet



www.modernmasters.com

1. Identification

Product Name: GREEN PATINA 10.OZ
Product Identifier: 301712
Product Use/Class: Waterbased aging solution
Supplier: Modern Masters, Inc.
 9380 San Fernando Road
 Sun Valley, CA 91352
 USA
Revision Date: 8/18/2015
Supercedes Date: New SDS
Manufacturer: Modern Masters, Inc.
 9380 San Fernando Road
 Sun Valley, CA 91352
 USA
Preparer: Regulatory Department
Emergency Telephone: 24 Hour Hotline: 847-367-7700

2. Hazard Identification

Classification

Symbol(s) of Product

Not a hazardous substance or mixture.

Signal Word

No Signal Word has been assigned.

3. Composition/Information On Ingredients

HAZARDOUS SUBSTANCES

| <u>Chemical Name</u> | <u>CAS-No.</u> | <u>Wt.% Range</u> | <u>GHS Symbols</u> | <u>GHS Statements</u> |
|----------------------|----------------|-------------------|--------------------|-----------------------|
| Ammonium Chloride | 12125-02-9 | 2.5-10 | GHS07 | H302-319 |
| Copper Sulfate | 7758-98-7 | 2.5-10 | GHS06 | H301-311-315-319 |

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, rinse mouth with water. If feeling unwell, get medical attention. Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: None Known

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep containers tightly closed. FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F. No unusual fire or explosion hazards noted.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

| Chemical Name | CAS-No. | Weight % Less Than | ACGIH TLV- TWA | ACGIH TLV- STEL | OSHA PEL-TWA | OSHA PEL- CEILING |
|-------------------|------------|-----------------------|-------------------|--------------------|--------------|----------------------|
| Ammonium Chloride | 12125-02-9 | 5.0 | 10 mg/m3 | 20 mg/m3 | N.E. | N.E. |
| Copper Sulfate | 7758-98-7 | 5.0 | N.E. | N.E. | N.E. | N.E. |

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

| | | | |
|---------------------------------|-----------------------------|---|----------------|
| Appearance: | Liquid | Physical State: | Liquid |
| Odor: | Solvent Like | Odor Threshold: | N.E. |
| Relative Density: | 1.035 | pH: | N.A. |
| Freeze Point, °C: | N.D. | Viscosity: | No Information |
| Solubility in Water: | Miscible | Partition Coefficient, n-octanol/ water: | N.D. |
| Decomposition Temp., °C: | N.D. | Explosive Limits, vol%: | N.A. - N.A. |
| Boiling Range, °C: | 100 - 537 | Flash Point, °C: | 93 |
| Flammability: | Does not Support Combustion | Auto-ignition Temp., °C: | N.D. |
| Evaporation Rate: | Slower than Ether | Vapor Pressure: | N.D. |
| Vapor Density: | Heavier than Air | | |

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: When heated to decomposition, it emits acrid smoke and irritating fumes.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

| <u>CAS-No.</u> | <u>Chemical Name</u> | <u>Oral LD50</u> | <u>Dermal LD50</u> | <u>Vapor LC50</u> |
|----------------|----------------------|------------------|--------------------|-------------------|
| 12125-02-9 | Ammonium Chloride | 1410 mg/kg Rat | N.I. | N.I. |
| 7758-98-7 | Copper Sulfate | 300 mg/kg Rat | 1000 mg/kg Rabbit | N.I. |

N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

| | <u>Domestic (USDOT)</u> | <u>International (IMDG)</u> | <u>Air (IATA)</u> | <u>TDG (Canada)</u> |
|------------------------------|-------------------------|-----------------------------|-------------------|---------------------|
| UN Number: | N.A. | N.A. | N.A. | N.A. |
| Proper Shipping Name: | Not Regulated | Not Regulated | Not Regulated | Not Regulated |
| Hazard Class: | N.A. | N.A. | N.A. | N.A. |
| Packing Group: | N.A. | N.A. | N.A. | N.A. |
| Limited Quantity: | No | No | No | No |

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

No TSCA 12(b) components exist in this product.

16. Other Information**HMIS RATINGS**

Health: 2* Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 2 Flammability: 1 Instability: 0

VOLATILE ORGANIC COMPOUNDS, g/L: 0

SDS REVISION DATE: 8/18/2015

REASON FOR REVISION:

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The manufacturer believes, to the best of its knowledge, information and belief, the information contained herein to be accurate and reliable as of the date of this safety data sheet. However, because the conditions of handling, use, and storage of these materials are beyond our control, we assume no responsibility or liability for personal injury or property damage incurred by the use of these materials. The manufacturer makes no warranty, expressed or implied, regarding the accuracy or reliability of the data or results obtained from their use. All materials may present unknown hazards and should be used with caution. The information and recommendations in this material safety data sheet are offered for the users' consideration and examination. It is the responsibility of the user to determine the final suitability of this information and to comply with all applicable international, federal, state, and local laws and regulations.