MAGIC METALLICS OXIDIZERS

SAFETY DATA SHEET (SDS)

Version: 02
Date of Issue: **March 8, 2021**

According to: Article 18(3)(a) of Regulation (EC) No 1272/2008

Section 1 – Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name: Magic Metallics Oxidizers (Green Patina [MM2020], Rapid Rust [MM305])
Other Means of Identification: None
Product Description: Liquid paint formulations (2 oz, 8 oz) intended to be used to oxidize Magic Metallics Metals. While the last coat of Magic Metallics Metals is wet, Magic Metallics Oxidizers are applied with a brush, sponge, or spritzer nozzle. The oxidation process will occur shortly after and once the desired effect is achieved, the surface is dried and sealed to stop the oxidation process.

Hazardous Components for labelling:

- Ammonium chloride (CAS No. 12125-02-9)
- Copper sulfate pentahydrate (CAS No. 7758-99-8)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s): Use product for general arts and crafts purposes.

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer: Mayco Colors/Coloramics, LLC
Address: 4077 Weaver Court
Hilliard, OH 43026
Supplier Telephone: 614-675-2031
Supplier Fax: 614-876-9904
Email: technical@maycocolors.com

1.4 Emergency telephone number

Emergency Telephone: Contact the local poison control centre.

Section 2 – Hazard(s) Identification

2.1. Classification of the substance or mixture

According to: Regulation (EC) No 1272/2008 [CLP]

	Health	Environment	Physical
Classification according to Regulation (EC) No 1272/2008 [CLP]	Eye Damage (Category 1), H318 Specific Target Organ Toxicity – Single Exposure (Category 2), H371	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	Not classified
SCL and/or M-factor	N/A	10	N/A
Classification Procedure	N/A	N/A	N/A

2.2. Label elements

Label Pictogram:

Signal Word: Danger

Hazard statements & Precautions:

Eye Damage (Category 1)	**Causes serious eye damage.** Wear protective gloves/protective clothing/eye protection/face protection. (P280) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. (P305+P351+P338) Immediately call a POISON CENTER or doctor/physician. (P310)
Specific Target Organ Toxicity – Single Exposure (Category 2)	**May irritate gastrointestinal tract.** Wash hands thoroughly after handling. (P264) Do not eat, drink or smoke when using this product. (P270) IF GASTROINTESTINAL irritation occurs: Get medical advice/attention. (P332+P313) Wear protective gloves/protective clothing/eye protection/face protection. (P280) Specific treatment: see a medical professional. (P321) Do not swallow. Do not induce vomiting. (P331) Dispose of contents/container in accordance with local, regional, national, and/or international regulations. (P501)
Hazardous to the aquatic environment, acute hazard (Category 1)	**Very toxic to aquatic life** Avoid release to the environment. (P273) Collect spillage. (P391) Dispose of contents/container in accordance with local, regional, national, and/or international regulations. (P501)
Hazardous to the aquatic environment, Chronic hazard (Category 1)	**Very toxic to aquatic life with long lasting effects** Avoid release to the environment. (P273) Collect spillage. (P391) Dispose of contents/container in accordance with local, regional, national, and/or international regulations. (P501)

2.3. Other hazards

- No other hazards have been identified for this product.

Section 3 – Composition / Information on Ingredients

Chemical Name	CAS No.	EINECS No.	% Weight
Ammonium chloride	12125-02-9	235-186-4	up to 12.70%
Copper sulfate pentahydrate	7758-99-8	231-847-6	up to 5.86%

[a] The remaining ingredients in the product are considered non-hazardous and were therefore not disclosed in the SDS.

Section 4 – First Aid Measures

4.1 Description of first aid measures

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin contact: No specific first aid measures are required. Wash skin thoroughly with soap and water. If skin irritation or rash occurs get medical attention. Launder contaminated clothing before reuse.

Inhalation: If exposed to excessive levels of material in the air, move the exposed person to fresh air. Seek medical attention if you feel unwell.

Ingestion: Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. IF GASTROINTESTINAL irritation occurs: Get medical advice/attention. Seek medical attention if in doubt.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to **Section 11** - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

- Not required.

Section 5 – Fire Fighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media: Use extinguishing media suitable for surrounding area if material is involved in a fire (e.g., water fog, water spray, foam, dry chemical or carbon dioxide).

Unsuitable Extinguishing Media: None known.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards: Container may rupture on heating. See also **Section 10** - Stability and Reactivity.

5.3 Advice for firefighters

- Wear a self-contained breathing apparatus.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment (PPE) and emergency procedures

Personal Precautions: Ventilate area if spilled in confined space or other poorly ventilated areas. Observe PPE advice in **Section 8** – Exposure Controls/Personal Protection.

Emergency Procedures: No specific precautions required**.** Keep unauthorized personnel away.

6.2 Environmental precautions:

- Prevent entry and contact with soil, drains, sewers, and waterways. Inform relevant local/regional/national/international authorities. Prevent further leakage or spillage if it is safe to do so.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures: Contain spill if safe to do so. Collect recoverable product and place in a designated container for recycle and/or disposal. Use care to avoid generation of spray/mist. Dispose of contents/container in accordance with local/regional/national/international regulations.

6.4 Reference to other sections

- Refer to **Section 8** - Exposure Controls/Personal Protection and **Section 13** – Disposal Considerations.

Section 7– Handling and Storage

7.1 Precautions for safe handling

- Avoid contact with eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Provide adequate ventilation. Observe good industrial hygiene practices. When using do not eat, drink or smoke. Wear appropriate personal protective equipment. Keep containers closed when not in use. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse.
- Refer to **Section 8** - Exposure Controls/Personal Protection

7.2 Conditions for safe storage, including any incompatibilities

- Keep from freezing. Do not store in open, unlabeled or mislabeled containers. Store away from incompatible materials. See **Section 10** for incompatible materials.

7.3 Specific end use(s)

- Refer to **Section 1.2** - Relevant identified uses.

Section 8– Exposure Controls / Personal Protection

8.1 Control Parameters:

Occupational exposure limits:

Chemical Name	CAS No.	ACGIH TLVs TWA (mg/m^3)	OSHA PELs TWA (mg/m^3)	NIOSH RELs TWA (mg/m^3)	DFG MAK TWA (mg/m^3)
Ammonium chloride	12125-02-9	10	0.05	10	Not applicable

8.2 Exposure Controls:

Appropriate engineering controls

- No special requirements under ordinary conditions of use and with adequate ventilation. Mechanical ventilation or local exhaust ventilation may be required. In case of spray formation use a respirator with an approved filter.

8.3 Personal Protective Equipment

Note: Consider the concentration and amount of product at the workplace when selecting PPE. Use protective equipment as required.

Respiratory: Use appropriate respiratory protection when handling to minimize exposure to splash or spray. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Eyes/Face: If contact is likely, safety glasses with side shields are recommended. An eyewash bottle or station should be available in the workplace. Wear a face shield if splash or spray is likely.

Hands: Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur, wear chemically protective gloves.

Body/Skin: Wear chemically impervious gloves, coveralls, apron, boots as necessary to minimize contact. Do not wear rings, watches or similar apparel that could entrap the material.

Thermal Hazards: None known.

Environmental Exposure Controls: Not available.

Hygiene measures: Observe good industrial hygiene practices. Avoid contact with skin. Contaminated work clothing should not be allowed out of the workplace and should be washed before reuse. When using the product do not eat, drink or smoke.

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Note: The data below are typical values and do not constitute a specification.

Appearance: **Physical state:** **Form:** **Color:** **Odor:**	 Liquid Liquid Light Blue No Odor	**Partition Coefficient n-octanol/water:** **Auto-ignition temperature:**	Not available Not available
Odor threshold:	Not available	**Decomposition temperature:**	Not available
pH (as supplied):	3	**Dynamic viscosity:**	Not available
Freezing point:	Not available	**Molecular weight:**	Mixture, not available
Boiling point:	Not available	**Taste:**	Not available
Flash point:	Not available	**Explosive properties:**	Not available
Evaporation rate:	Not available	**Oxidizing properties:**	Not available
Flammability:	Not available	**Surface tension:**	Not available
Upper/lower explosive limits:	Not available	**Gas group:**	Not available
Vapor pressure:	Not available	**pH (as solution):**	Not available
Water solubility:	Water based solution	**VOC:**	Not available
Solubility (other):	Not available	**Particle size range:**	Not available
Vapor density (Air = 1):	Not available	**Specific gravity (Water = 1):**	1.012
Relative density:	Not available		

9.2 Other information

- No data available

Section 10 – Stability and Reactivity

10.1 Reactivity

- May reduce.

10.2 Chemical stability

- This material is considered stable under normal handling and storage conditions.

10.3 Possibility of hazardous reactions

- None known.

10.4 Conditions to avoid

- None known.

10.5 Incompatible materials

- Strong acids
- Strong bases
- Strong reducing agents
- Strong oxidizing agents

10.6 Hazardous decomposition products

- Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion. Irritating and toxic substances may be emitted upon combustion, burning, or decomposition of dry solids.

Section 11 – Toxicological Information

Likely routes of exposure: Skin/eye contact.
Potential signs and symptoms:

Acute oral toxicity:	Ammonium chloride (CAS No. 12125-02-9) and copper sulfate pentahydrate (CAS No. 7758-99-8) have been classified for acute oral toxicity, however the product is practically nontoxic based on available data. The oral acute toxicity estimate (ATE) for the whole product is >3614 mg/kg.
Acute dermal toxicity:	The components in this product have not been classified for acute dermal toxicity. The product is practically non-toxic based on available data.
Acute inhalation toxicity:	The components in this product have not been classified for acute inhalation toxicity. The product is practically non-toxic based on available data.
Skin corrosion/irritation:	The components in this product are not irritating to skin or mucous membranes based on animal studies and available data.
Serious eye damage/irritation:	Ammonium chloride (CAS No. 12125-02-9) has been classified for eye irritation; copper sulfate pentahydrate (CAS No. 7758-99-8) has been classified for eye damage. Signs and symptoms include but are not limited to: watering eyes, itchiness, redness, dry eyes and pain. Wash eyes thoroughly following eye contact and wear proper PPE to minimize dust exposure. The other components in this product are not irritating to the eyes based on animal studies and available data.
Respiratory or skin sensitization:	The components in this product are not sensitizing to the skin or respiratory system based on available data.
Mutagenicity:	The components of this product are not classified with respect to mutagenicity by the IARC, NTP, and ACGIH.
Carcinogenicity:	No components are classified with respect to carcinogenicity by the IARC, NTP, and ACGIH.
Reproductive Toxicity:	The components in this product are not reproductive hazards based on available information, human and/or animal studies.
Specific target organ toxicity (single exposure):	Copper sulfate pentahydrate (CAS No. 7758-99-8) may cause gastrointestinal irritation. Signs and symptoms include, but are not limited to: nausea, vomiting and abdominal discomfort. The other components in this product are not single exposure specific target organ toxicity hazards based on available information, human and/or animal studies.
Specific target organ toxicity (repeated exposure):	The components in this product are not repeated exposure specific target organ toxicity hazards based on available information, human and/or animal studies.
Aspiration hazard:	The components in this product are not aspiration hazards based on available information, human and/or animal studies.

References:
ECHA. 2020. REACH Registered Substances Database.
International Agency for Research on Cancer

Section 12 – Ecological Information

12.1 Toxicity

Chemical Name	CAS No.	Species	Result (mg/L)
Ammonium chloride	12125-02-9	Oncorhynchus mykiss	LC50=42.91 (96-hour)
		Ceriodaphnia acanthina	LC50=136.6
		Chlorella vulgaris	EC50=1300 (5 days)

Copper sulfate pentahydrate (CAS No. 7758-99-8) has been classified for acute aquatic toxicity (Category 1) and chronic aquatic toxicity (Category 1).

12.2 Persistence and degradability

- No data available.

12.3 Bioaccumulative potential

- Ammonium chloride (CAS No. 12125-02-9) is not expected to adsorb or bioaccumulate to a significant extent.

12.4 Mobility in Soil

- No data available.

12.5 Results of PBT and vPvB assessment

- No data available.

12.6 Other adverse effects

- No further data available.

Section 13 – Disposal Considerations

13.1 Waste treatment methods

Preparing wastes for disposal: Use product for its intended purpose or recycle if possible. Dispose of waste in accordance with local, regional, national, and/or international regulations. The empty container has residues which may exhibit hazards of the product.

Contaminated Packaging: Container packaging may exhibit hazards.

Section 14 – Transport Information

Note: This product is not regulated as dangerous goods for transport. Review classification requirements before shipping materials at elevated temperatures.

	ADR/RID/ADNR/DOT	IMO/IMDG	ICAO/IATA
14.1 UN number	Not regulated	Not regulated	Not regulated
14.2 UN proper shipping name	Not regulated	Not regulated	Not regulated
14.3 Transport hazard class(es):	Not regulated	Not regulated	Not regulated
14.4 Packing group	Not regulated	Not regulated	Not regulated
14.5 Environmental hazards	Not regulated	Not regulated	Not regulated
14.6 Special precautions for user	Not regulated	Not regulated	Not regulated

Section 15 – Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union
Seveso Directive (2012/18/EU): No components in this product are listed.
Regulation (EC) No. 1005/2009, Annex I and II: No components in this product are listed.
Regulation (EC) No. 689/2008, Annex I, Parts I-III: No components in this product are listed.
Regulation (EC) No. 850/2004, Annex I: No components in this product are listed.

International:
IARC: No components in this product are classified with respect to carcinogenicity.

15.2 Chemical Safety Assessment

- None available for the components in this product.

Note: The information that was used to confirm the compliance status of this product may deviate from the chemical information shown in Section 3.

Section 16 – Other Information

List of acronyms and abbreviations:

ACGIH: American Conference of Governmental Industrial Hygienists	vPvB: very Persistent, very Bioaccumulative
ADR: International Carriage of Dangerous Goods by Road	MARPOL: Maritime Pollution
ADNR: Regulation for the Carriage of Dangerous Substances on the Rhine	M-factor: Multiplying factor
ATE: Acute Toxicity Estimate	NIOSH REL : National Institute for Occupational Safety and Health recommended exposure limit
CAS: Chemical Abstract Service Number	NTP: National Toxicology Program
CLP: Classification, Labelling and Packaging Regulation (EC) No 1272/2008	OSHA: Occupational Safety and Health Administration
DFG MAK: Deutsche Forschungsgemeinschaft maximale arbeitsplatz-konzentration	PBT: Persistent, Bioaccumulative and Toxic
DOT: Department of Transportation	PEL: Permissible Exposure Limit
EC: European Commission	PPE: Personal Protective Equipment
ECHA: European Chemicals Agency	REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
GHS: Globally Harmonized System	RID: International Carriage of Dangerous Goods by Rail
IARC: International Agency for Research on Cancer	SCL: Specific Concentration Limit
IATA: International Air Transport Association	SDS: Safety Data Sheet

References:

- European Chemicals Agency (ECHA) Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
- European Chemicals Agency Classification and Labelling Inventory Database.
- International Agency for Research on Cancer.

Disclaimer:
To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes 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 that exist.

Revision Indicator: This is a 1st revision Safety Data Sheet.

Creation Date: November 04, 2020

Revision Date: March 08, 2021