

27105-9004  
27105-1009Product: **AM213**

SDS Version 2.0

Preparation Date: 12/10/2019

Page 1

**TRIANGLE COATINGS, INC.**  
**SAFETY DATA SHEET****Section 1: Chemical Product and Company Identification**PRODUCT NAME: **Rust Solution**  
IDENTIFICATION NUMBER: AM213  
PRODUCT USE/CLASS: Rusting Solution for Iron

Date Printed: 12/12/2019

SUPPLIER:  
Triangle Coatings, Inc.  
4763 Bennett Drive  
Livermore, CA 94551  
+1-925-583-0800 (8:00am-5:00pm)MANUFACTURER:  
Triangle Coatings, Inc.  
4763 Bennett Drive  
Livermore, CA 94551  
+1-925-583-0800 (8:00am-5:00pm)CHEMTREC 24HR EMERGENCY TELEPHONE  
+1-800-424-9300 (USA/Canada)

PREPARER: nbk, PHONE: +1-925-583-0800,

**Section 2: Hazards Identification****GHS Classification**

Physical hazards	Not Classified
Health hazards	Not Classified
Environmental hazards	Chronic aquatic toxicity (Category 2), H411

**GHS Label element****GHS HAZARD STATEMENTS**

H411: Toxic to aquatic life with long-lasting effects

**GHS PRECAUTION PHRASES**

<b>Prevention</b>	P273: Avoid release to the environment.
<b>Response</b>	P391: Collect spillage.
<b>Storage</b>	P401: Store at temperatures above 32°F (0°C). Keep from freezing
<b>Disposal</b>	P501: Dispose of contents and containers in accordance with national and local regulations.

**Hazards not otherwise classified (HNOC)**

None known.

**Other Information**

Page 1 of 7

Product: **AM213**

SDS Version 2.0

Preparation Date: 12/10/2019

Page 2

This product does not contain any substances classified as PBT or vPvB.  
Unknown acute toxicity

### Section 3: Composition, Information on Ingredients

Substance/mixture: Mixture

Product Name: **Rust Solution**

CAS-No.	Components	Weight Percent
7758-98-7	Anhydrous Copper Sulfate	2.5-5%
12125-02-9	Ammonium Chloride	2.5-5%

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

### Section 4: First Aid Measures

#### Description of first aid measures

**General advice:** Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

**Inhalation:** If inhaled as aerosol, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

**Skin contact:** For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

**Eye contact:** If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Keep eyelids well open to rinse the whole eye surface and eyelids with water.

**Ingestion:** For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention. Designate the product. Show label if possible.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

#### Indication of any immediate medical attention and special treatment needed

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### Section 5: Fire-fighting Measures

**Suitable extinguishing media:** This product is not flammable. Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function but will be less effective.

**Unsuitable extinguishing media:** no data available

#### Special hazards arising from the substance or mixture

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition

Product: **AM213**

SDS Version 2.0

Preparation Date: 12/10/2019

Page 3

to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

#### **Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound

## **Section 6: Accidental Release Measures**

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Small spills: Absorb with materials such as: Sand. Vermiculite. Collect in suitable and properly labeled containers. Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

## **Section 7: Handling and Storage**

#### **Precautions for safe handling**

**Advice on safe handling:** Handle in accordance with good industrial hygiene and safety practice.

#### **Conditions for safe storage, including any incompatibilities**

**Storage Conditions:** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials:** None known based on information supplied.

Minimum temperature allowed during storage and transportation: 0 °C (32°F)

## **Section 8: Exposure Controls/Personal Protection**

#### **Control parameters**

Exposure limits are listed below, if they exist.

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Carc.	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH Carc.	<b><u>OEL Note</u></b>
Anhydrous Copper Sulfate	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.

Product: **AM213**

SDS Version 2.0

Preparation Date: 12/10/2019

Page 4

Ammonium Chloride, as fume	N.E.	10 8h	N.E.	20 15m.	N.E.	N.E.	10	N.E.	20.	N.E.	N.E.
----------------------------	------	-------	------	---------	------	------	----	------	-----	------	------

**Individual protection measures****Personal protective equipment**

**Eye/face protection:** Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

**Skin protection**

**Hand protection:** Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

**Other protection:** No precautions other than clean body-covering clothing should be needed.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

**Appropriate Engineering Controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be enough for most operations. Local exhaust ventilation may be necessary for some operations.

**Section 9: Physical and Chemical Properties**

<b>State of Matter:</b>	liquid
<b>Color:</b>	Transparent blue
<b>Odor:</b>	Mild (or faint)
<b>Odor Threshold:</b>	No Data Available
<b>pH:</b>	Approx. 4.0-4.5
<b>Freezing Point:</b>	0 °C (32°F)
<b>Boiling Point:</b>	100 °C (212°F)
<b>Flash Point:</b>	No Data Available
<b>Evaporation Rate:</b>	> N-butyl acetate
<b>Lower explosion limit:</b>	No Data Available
<b>Upper Explosion Limit:</b>	No Data Available
<b>Vapor Pressure:</b>	No Data Available
<b>Vapor Density:</b>	No Data Available
<b>Density:</b>	1.033 g/cm <sup>3</sup>
<b>Relative Vapor Density:</b>	No Data Available
<b>Specific Gravity:</b>	Approximately 1.03
<b>Solubility in Water:</b>	Soluble in water
<b>Partition Coefficient: n-octanol/water:</b>	No Data Available
<b>Auto-ignition Temperature:</b>	No Data Available
<b>Decomposition Temperature:</b>	No Data Available
<b>Viscosity:</b>	No Data Available

Product: **AM213**

SDS Version 2.0

Preparation Date: 12/10/2019

Page 5

**Volatiles by wt. @ 20 °C** 96.06%  
**VOC Content:** 0g/l (0.0 lb./gal.)

## Section 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.  
**Possibility of hazardous reactions:** The product is stable.  
**Conditions to avoid:** Protect from freezing - product stability may be affected.  
**Incompatible materials:** None known based on information supplied.  
**Hazardous decomposition products** None known based on information supplied.

## Section 11: Toxicological Information

### Information on toxicological effects Acute toxicity

**Conclusion/Summary:** There are no data available on the mixture itself.

### Information on likely routes of exposure

**Product Information:** No data available  
**Inhalation:** No data available.  
**Eye contact:** No data available.  
**Skin Contact:** No data available.  
**Ingestion:** No data available.

### Component Information:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Anhydrous Copper Sulfate	N.E	N.E.	N.E.
Ammonium Chloride, as fume	7,142.86mg/kg (ATE)	N.E.	N.E.

### Carcinogenicity

The information below indicates whether each agency has listed any ingredient as a carcinogen:

Chemical Name	IARC	NTP	OSHA Carcinogen
None of the ingredients are listed nor exempt			

### Information on toxicological effects

**Symptoms:** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Sensitization:** No information available.  
**Germ cell mutagenicity:** No information available.  
**Carcinogenicity:** No information available.  
**Reproductive toxicity:** No information available.  
**STOT - single exposure:** No information available.  
**STOT - repeated exposure:** No information available.  
**Aspiration hazard:** No information available.

Product: **AM213**

SDS Version 2.0

Preparation Date: 12/10/2019

Page 6

## Section 12: Ecological Information

<b>Ecotoxicity:</b>	Chronic aquatic toxicity (Category 2), H411
<b>Mobility in Soil:</b>	No data available.
<b>Toxicity:</b>	No data available.
<b>Other adverse effects:</b>	No data available
<b>Bio-accumulative Potential:</b>	No chemical in this mixture is known to bioaccumulate
<b>Persistence and Degradability:</b>	No data available

### Component Information:

Chemical Name	Algae/aquatic plants EC50	Fish LC50	Crustacea
Anhydrous Copper Sulfate	N.E.	N.E.	N.E.
Ammonium Chloride, as fume	N.E.	N.E.	N.E.

## Section 13: Disposal Considerations

**General information:** The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

**Disposal methods:** Dispose of contents and containers in accordance with national and local regulations.

## Section 14: Transportation Information

### Land transport (DOT)

Proper Shipping Name: Not regulated for transport  
 Other Information: Protect from freezing, when exposed to cold temperatures approaching 0 °C (32 °F) or below.

### Sea transport (IMDG)

Proper Shipping Name: Not regulated for transport

### Air transport (ICAO/IATA)

Proper Shipping Name: Not regulated for transport

### Emergency Response Guide (ERG):

Not regulated for transport

## Section 15: Regulatory Information

### SARA 302 Components

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

### SARA 313 Components

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.

Product: **AM213**

SDS Version 2.0

Preparation Date: 12/10/2019

Page 7

**SARA 311/312 Hazards**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312.

**HAPS (Hazardous Air Pollutants):** This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40CFR 61).

**U.S. State regulations**

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

CAS	Chemical Name	% By Weight	CA P65	MA	NJ	PA
7758-98-7	Anhydrous Copper Sulfate	2.5-5%	No	No	No	No
12125-02-9	Ammonium Chloride	2.5-5%	No	No	No	No

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):**

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

**Section 16: Other Information**

This product is recommended only for use in industrial or trade (commercial) applications. It is not suitable for use in Do-It-Yourself applications.

Revision date: December 10, 2019  
 Version Number: 2.0  
 Revision explanation: Update to conform to GHS  
 Previous revision date: May 1, 2017

Information Sources: OSHA 29CFR 1910.1200

**NFPA RATING:** HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

**Hazardous Material Information System III (U.S.A.) :****HMIS Category****HMIS Rating**

<b>Health *</b>	1
<b>Flammability</b>	0
<b>Physical hazards</b>	0
Personal Protective Equipment	C

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program.

\*If health rating is mark with \*, it is a chronic health hazard

Triangle Coatings, Inc. assumes no legal responsibility for use of or reliance upon the information in this SDS and such information shall in no case be considered a part of our terms and conditions of sale. The user is responsible for determining whether the Triangle Coatings product is suitable for user's method of use or application. Triangle Coatings is not liable for any failure to observe the precautionary measures described in this SDS. THERE ARE NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT IT DESCRIBES. IN NO EVENT SHALL TRIANGLE COATINGS, INC. BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

**End of Safety Data Sheet**

Page 7 of 7

27105-2584

Product: **AM203**

SDS Version 3.0

Preparation Date: 12/10/2019

Page 1

## **TRIANGLE COATINGS, INC.**

### **SAFETY DATA SHEET**

#### **Section 1: Chemical Product and Company Identification**

PRODUCT NAME: **Iron Metallic Finish**  
IDENTIFICATION NUMBER: AM203  
PRODUCT USE/CLASS: Metallic Decorative Coating

Date Printed: 12/18/2019

SUPPLIER:  
Triangle Coatings, Inc.  
4763 Bennett Drive  
Livermore, CA 94551  
+1-925-583-0800 (8:00am-5:00pm)

MANUFACTURER:  
Triangle Coatings, Inc.  
4763 Bennett Drive  
Livermore, CA 94551  
+1-925-583-0800 (8:00am-5:00pm)

CHEMTREC 24HR EMERGENCY TELEPHONE  
+1-800-424-9300 (USA/Canada)

PREPARER: nbk, PHONE: +1-925-583-0800,

#### **SECTION 2 - HAZARDS IDENTIFICATION**

##### **GHS CLASSIFICATION OF SUBSTANCE OR MIXTURE**

Physical hazards:	Eye Irritation (Category 2A)
Health hazards	Not Classified
Environmental hazards	Hazardous to the aquatic environment, long-term hazard (Category 3), H412

##### **GHS LABEL ELEMENTS**

Signal Word:	None
Hazard pictograms:	None
Hazard statements	H412: Harmful to aquatic life with long-lasting effects

##### **GHS PRECAUTION PHRASES**

<b>Prevention</b>	P273: Avoid release to the environment.
<b>Response</b>	None
<b>Storage</b>	P401: Store at temperatures above 32°F (0°C). Keep from freezing
<b>Disposal</b>	P501: Dispose of contents and containers in accordance with national and local regulations.

##### **Hazards not otherwise classified (HNOC)**

None known.

##### **Other Information**

This product does not contain any substances classified as PBT or vPvB.  
Unknown acute toxicity

#### **Section 3: Composition, Information on Ingredients**



Product: **AM203**

SDS Version 3.0

Preparation Date: 12/10/2019

Page 2

**Substance/mixture:** Mixture  
**Product Name:** Iron Metallic Finish

<u>CAS-No.</u>	<u>Components</u>	<u>Weight Percent</u>
7439-89-6	Iron Metal Powder	25-50%
7727-43-7	Barium Sulfate	2.5-10%
Proprietary	Acrylic Polymer Emulsion	2.5-10%
57-55-6	Propylene Glycol	1.0-2.5%
1314-13-2	Zinc Oxide	1.0-2.5%

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product. Specific chemical identities and/or exact percentage (concentration) of the composition may have been withheld as a trade secret.

## Section 4: First Aid Measures

### Description of first aid measures

**General advice:** Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

**Inhalation:** If inhaled as aerosol, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

**Skin contact:** For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

**Eye contact:** If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Keep eyelids well open to rinse the whole eye surface and eyelids with water.

**Ingestion:** For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention. Designate the product. Show label if possible.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

### Indication of any immediate medical attention and special treatment needed

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## Section 5: Fire-fighting Measures

**Suitable extinguishing media:** The product is not flammable. Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function but will be less effective.

**Unsuitable extinguishing media:** no data available

### Special hazards arising from the substance or mixture

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition

Product: **AM203**

SDS Version 3.0

Preparation Date: 12/10/2019

Page 3

to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

#### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound

## Section 6: Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Small spills: Absorb with materials such as: Sand. Vermiculite. Collect in suitable and properly labeled containers. Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

## Section 7: Handling and Storage

#### Precautions for safe handling

**Advice on safe handling:** Handle in accordance with good industrial hygiene and safety practice.

#### Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials: None known based on information supplied.

Minimum temperature allowed during storage and transportation: 0 °C (32°F)

## Section 8: Exposure Controls/Personal Protection

#### Control parameters

Exposure limits are listed below, if they exist.

#### Component Regulation Type of listing Value/Notation

##### Exposure Limits

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m3)	OSHA STEL (ppm)	OSHA STEL (mg/m3)	OSHA Carc.	ACGIH TWA (ppm)	ACGIH TWA (mg/m3)	ACGIH STEL (ppm)	ACGIH STEL (mg/m3)	ACGIH Carc.	<u>OEL Note</u>
Iron Metal Powder	N.E.	15	N.E.	N.E.	N.E.	N.E.	15.	N.E.	N.E.	N.E.	Nuisance dust.
Barium Sulfate	N.E.	15	N.E.	N.E.	N.E.	N.E.	5	N.E.	N.E.	N.E.	Respirable Dust

Product: **AM203**                      SDS Version 3.0                      Preparation Date: 12/10/2019                      Page 4

Acrylic Polymer Emulsion	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.
Propylene Glycol	150.	10	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	N.E.	Vapor and particulates
Zinc Oxide	15 dust.	N.E.	N.E.	N.E.	N.E.	N.E.	2 R	10 R	N.E.	N.E.	Total dust

### **Personal protective equipment**

**Eye/face protection:** Use safety glasses (with side shields). If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

#### **Skin protection**

**Hand protection:** Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized.

**Other protection:** No precautions other than clean body-covering clothing should be needed.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In misty atmospheres, use an approved particulate respirator.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

**Appropriate Engineering Controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be enough for most operations. Local exhaust ventilation may be necessary for some operations.

## **Section 9: Physical and Chemical Properties**

<b>State of Matter:</b>	Liquid
<b>Color:</b>	Gray
<b>Odor:</b>	Mild (or faint)
<b>Odor Threshold:</b>	No Data Available
<b>pH:</b>	Approx. 9.0-9.5
<b>Freezing Point:</b>	0 °C (32°F)
<b>Boiling Point:</b>	100 °C (212°F) _
<b>Flash Point:</b>	No Data Available
<b>Evaporation Rate:</b>	> N-butyl acetate
<b>Lower explosion limit:</b>	No Data Available
<b>Upper Explosion Limit:</b>	No Data Available
<b>Vapor Pressure:</b>	No Data Available
<b>Vapor Density:</b>	No Data Available
<b>Density:</b>	2.069 g/cm <sup>3</sup>
<b>Relative Vapor Density:</b>	No Data Available
<b>Specific Gravity:</b>	Approximately 2.07
<b>Solubility in Water:</b>	Miscible with water
<b>Partition Coefficient: n-octanol/water:</b>	No Data Available
<b>Auto-ignition Temperature:</b>	No Data Available
<b>Decomposition Temperature:</b>	No Data Available
<b>Viscosity:</b>	95-105 Krb Units

Product: **AM203**

SDS Version 3.0

Preparation Date: 12/10/2019

Page 5

**Volatiles by wt. @ 20 °C** 32.06%  
**VOC Content:** 65g/l (0.54 lb./gal.)

## Section 10: Stability and Reactivity

**Reactivity:** No specific test data related to reactivity available for this product or its ingredients.

**Possibility of hazardous reactions:** The product is stable.

**Conditions to avoid:** Protect from freezing - product stability may be affected.

**Incompatible materials:** None known based on information supplied.

**Hazardous decomposition products** None known based on information supplied.

## Section 11: Toxicological Information

### Information on toxicological effects Acute toxicity

<b>Conclusion/Summary</b>	There are no data available on the mixture itself.
Toxicological effects	Not regarded as a health hazard under current legislation.
<u>Acute toxicity - oral</u>	
Notes (oral LD <sub>50</sub> )	Based on available data the classification criteria are not met.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD <sub>50</sub> )	Based on available data the classification criteria are not met.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC <sub>50</sub> )	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Animal data	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.
Respiratory sensitization	Based on available data the classification criteria are not met.
Skin sensitization	Based on available data the classification criteria are not met.
<u>Germ cell mutagenicity</u>	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - STOT - single exposure	Based on available data the classification criteria are not met. development
STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.
STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.
Aspiration hazard	Based on available data the classification criteria are not met.
General information	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	No specific symptoms known. Spray/mists may cause respiratory tract irritation.
Ingestion	No specific symptoms known. May cause discomfort if swallowed.
Skin contact	No specific symptoms known. May cause discomfort.
Eye contact	No specific symptoms known. May be slightly irritating to eyes.

Product: **AM203**

SDS Version 3.0

Preparation Date: 12/10/2019

Page 6

Route of entry                      Ingestion Inhalation Skin and/or eye contact

Target organs                        No specific target organs known.

**Component Information:**

<u>Chemical Name</u>	<u>Weight Percent</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Iron Metal Powder	25-50%	>5000mg/kg (rat)	N.E.	N.E.
Barium Sulfate	2.5-10%	N.E.	N.E.	N.E.
Acrylic Polymer Emulsion	2.5-10%	N.E.	N.E.	N.E.
Propylene Glycol	1.0-2.5%	>8000mg/kg (rat)	75000mg/kg (rat)	6.82mg.l 4h (rat)
Zinc Oxide	1.0-2.5%	7950mg/kg (rat)	N.E.	N.E.

**Carcinogenicity**

The information below indicates whether each agency has listed any ingredient as a carcinogen:

<u>Chemical Name</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA Carcinogen</u>
None of the ingredients are listed nor exempt.			

**Section 12: Ecological Information****Ecotoxicity:** Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.**Mobility in Soil:** No data available.**Toxicity:** No data available.**Other adverse effects:** No data available**Bio-accumulative Potential:** No chemical in this mixture are known to bioaccumulate**Persistence and Degradability:** No data available**Component Information:**

<u>Chemical Name</u>	<u>Weight Percent</u>	<u>Algae/aquatic plants EC50</u>	<u>Fish LC50</u>	<u>Crustacea</u>
Iron Metal Powder	25-50%	N.E	13.6mg/l saxatilis	N.E.
Barium Sulfate	2.5-10%	N.E	N.E.	N.E.
Acrylic Polymer Emulsion	2.5-10%	N.E	N.E.	N.E.
Propylene Glycol	1.0-2.5%	N.E	40613mg/l	18340mg/l
Zinc Oxide	1.0-2.5%	N.E.	N.E.	N.E.

**Results of PBT and vPvB assessment/other adverse effects**

Other adverse effects                None known.

**Section 13: Disposal Considerations****General information**                The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way.**Disposal methods**                    Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse. Dispose of waste to licensed waste disposal site in accordance with the

Product: **AM203**

SDS Version 3.0

Preparation Date: 12/10/2019

Page 7

requirements of the federal, state and local regulations.

## Section 14: Transportation Information

### Land transport (DOT)

Proper Shipping Name: Not regulated for transport  
 Other Information: Protect from freezing, when exposed to cold temperatures approaching 0 °C (32 °F) or below.

### Sea transport (IMDG)

Proper Shipping Name: Not regulated for transport

### Air transport (ICAO/IATA)

Proper Shipping Name: Not regulated for transport

### Emergency Response Guide (ERG):

Not regulated for transport

## Section 15: Regulatory Information

### **SARA 302 Components**

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

### **SARA 313 Components**

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**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 311/312.

**HAPS (Hazardous Air Pollutants):** This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40CFR 61).

### **U.S. State regulations**

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

<u>CAS No.</u>	<u>Chemical Name</u>	<u>% By Weight</u>	<u>CA P65</u>	<u>MA</u>	<u>NJ</u>	<u>PA</u>
7439-89-6	Iron Metal Powder	25-50%	No	No	No	No
7727-43-7	Barium Sulfate	2.5-10%	No	No	No	No
Proprietary	Acrylic Polymer Emulsion	2.5-10%	No	No	No	No
57-55-6	Propylene Glycol	1.0-2.5%	No	No	No	Yes
1314-13-2	Zinc Oxide	1.0-2.5%	No	No	No	No

### **California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):**

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## Section 16: Other Information

This product is recommended only for use in industrial or trade (commercial) applications. It is not suitable for use in Do-It-Yourself applications.

Product: **AM203**

SDS Version 3.0

Preparation Date: 12/10/2019

Page 8

Revision date: December 10, 2019  
 Version Number: 3.0  
 Revision explanation: Update to conform to GHS  
 Previous revision: 2.0  
 Previous revision date: May 1, 2017

Information Sources: OSHA 29CFR 1910.1200

**NFPA RATING:** HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

**Hazardous Material Information System III (U.S.A.) :**

HMIS Category	HMIS Rating
Health *	1
Flammability	0
Physical hazards	0
Personal Protective Equipment	B

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program.

\*If health rating is mark with \*, it is a chronic health hazard

Triangle Coatings, Inc. assumes no legal responsibility for use of or reliance upon the information in this SDS and such information shall in no case be considered a part of our terms and conditions of sale. The user is responsible for determining whether the Triangle Coatings product is suitable for user's method of use or application. Triangle Coatings is not liable for any failure to observe the precautionary measures described in this SDS. THERE ARE NO WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS INFORMATION OR TO THE PRODUCT IT DESCRIBES. IN NO EVENT SHALL TRIANGLE COATINGS, INC. BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES.

**End of Safety Data Sheet**