

# SAFETY DATA SHEET



Revision date 01-Feb-2024

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** Semi-Moist Underglaze - Warm Green

### Other means of identification

**Product Code(s)** FG00737

**Synonyms** 41416M, 01683A

### Recommended use of the chemical and restrictions on use

**Recommended use**

**Restrictions on use**

### Details of the supplier of the safety data sheet

#### Manufacturer Address

American Art Clay Co Inc  
6060 Guion Road  
Indianapolis, IN 46254-1222 USA  
Toll Free: 1-800-999-5456  
CustomerCare@Amaco.com

### Emergency telephone number

**Emergency Telephone** U.S. Poison Control 1-800-222-1222

## 2. Hazard(s) identification

### Classification

Specific target organ toxicity (repeated exposure)

Category 2

### Hazards not otherwise classified (HNOC)

Not applicable

### Label elements

#### Hazard statements

##### **Warning**

H373 - May cause damage to organs through prolonged or repeated exposure



**Physical state** Solid

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

Get medical advice/attention if you feel unwell

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Other information**

May be harmful if swallowed. Harmful to aquatic life with long lasting effects. Toxic to aquatic life.

### 3. Composition/information on ingredients

Not applicable.

**Mixture**

| Chemical name         | CAS No     | Weight-% |
|-----------------------|------------|----------|
| C.I. Pigment Green 51 | 68553-01-5 | 40 - 60  |
| Quartz                | 14808-60-7 | 3 - <5   |
| Kaolin                | 1332-58-7  | 3 - <5   |
| Frits, chemicals      | 65997-18-4 | 3 - <5   |
| 1,2,3-Propanetriol    | 56-81-5    | 1 - <3   |

### 4. First-aid measures

**Description of first aid measures**

|                       |  |
|-----------------------|--|
| <b>General advice</b> | Show this safety data sheet to the doctor in attendance.   |
| <b>Inhalation</b>     | Remove to fresh air.   |
| <b>Eye contact</b>    | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| <b>Skin contact</b>   | Wash skin with soap and water.   |
| <b>Ingestion</b>      | Rinse mouth.   |

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

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

**Note to physicians** Treat symptomatically.

**5. Fire-fighting measures**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

**Specific hazards arising from the chemical** No information available.

**Explosion data**  
**Sensitivity to mechanical impact** None.  
**Sensitivity to static discharge** None.

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**6. Accidental release measures**

Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.

**Other information** Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

**7. Handling and storage**

Precautions for safe handling

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

Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place.

**8. Exposure controls/personal protection**

Control parameters

**Exposure Limits**

| Chemical name                       | ACGIH TLV | OSHA PEL   | NIOSH   |
|-------------------------------------|-----------|--|---|
| C.I. Pigment Green 51<br>68553-01-5 | -         | TWA: 0.5 mg/m <sup>3</sup> Cr<br>(vacated) TWA: 0.5 mg/m <sup>3</sup> Cr | IDLH: 25 mg/m <sup>3</sup> Cr(III)<br>TWA: 0.5 mg/m <sup>3</sup> Cr |

|                                |  |  |  |
|--------------------------------|--|--|--|
| Quartz<br>14808-60-7           | TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter   | TWA: 50 µg/m <sup>3</sup><br>(vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust<br>: (250)/(%SiO <sub>2</sub> + 5) mppcf<br>TWA respirable fraction<br>: (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup><br>TWA respirable fraction   | IDLH: 50 mg/m <sup>3</sup> respirable dust<br>TWA: 0.05 mg/m <sup>3</sup> respirable dust  |
| Kaolin<br>1332-58-7            | TWA: 2 mg/m <sup>3</sup> particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter   | TWA: 15 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> total dust<br>(vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction   | TWA: 10 mg/m <sup>3</sup> total dust<br>TWA: 5 mg/m <sup>3</sup> respirable dust   |
| Frits, chemicals<br>65997-18-4 | STEL: 10 mg/m <sup>3</sup> Zr<br>TWA: 0.01 mg/m <sup>3</sup> As<br>TWA: 0.05 mg/m <sup>3</sup> Pb<br>TWA: 0.01 mg/m <sup>3</sup> Cd<br>TWA: 0.002 mg/m <sup>3</sup> Cd respirable particulate matter<br>TWA: 0.5 mg/m <sup>3</sup> Sb<br>TWA: 1 mg/m <sup>3</sup> Cu dust and mist<br>TWA: 3 mg/m <sup>3</sup> W respirable particulate matter in the absence of cobalt<br>TWA: 5 mg/m <sup>3</sup> Zr<br>TWA: 0.02 mg/m <sup>3</sup> Mn respirable particulate matter<br>TWA: 0.1 mg/m <sup>3</sup> Mn inhalable particulate matter | TWA: 10 µg/m <sup>3</sup> As<br>TWA: 50 µg/m <sup>3</sup> Pb<br>TWA: 0.5 mg/m <sup>3</sup> Sb<br>TWA: 5 mg/m <sup>3</sup> Zr<br>(vacated) TWA: 0.5 mg/m <sup>3</sup> Sb<br>(vacated) TWA: 5 mg/m <sup>3</sup> Zr<br>(vacated) STEL: 10 mg/m <sup>3</sup> Zr<br>(vacated) Ceiling: 5 mg/m <sup>3</sup><br>Ceiling: 5 mg/m <sup>3</sup> Mn | IDLH: 5 mg/m <sup>3</sup> As<br>IDLH: 9 mg/m <sup>3</sup> Cd dust and fume<br>IDLH: 50 mg/m <sup>3</sup> Sb<br>IDLH: 100 mg/m <sup>3</sup> Cu dust and mist<br>IDLH: 500 mg/m <sup>3</sup> Mn<br>IDLH: 25 mg/m <sup>3</sup> Zr<br>IDLH: 100 mg/m <sup>3</sup> Pb<br>IDLH: 10 mg/m <sup>3</sup> Ni<br>Ceiling: 0.002 mg/m <sup>3</sup> As 15 min<br>Ceiling: 0.05 mg/m <sup>3</sup> V dust and fume 15 min<br>TWA: 0.5 mg/m <sup>3</sup> Sb<br>TWA: 1 mg/m <sup>3</sup> Cu dust and mist<br>TWA: 1 mg/m <sup>3</sup> Mn<br>TWA: 5 mg/m <sup>3</sup> except Zirconium tetrachloride Zr<br>TWA: 0.050 mg/m <sup>3</sup> Pb<br>TWA: 0.015 mg/m <sup>3</sup> except Nickel carbonyl Ni<br>STEL: 3 mg/m <sup>3</sup> Mn<br>STEL: 10 mg/m <sup>3</sup> Zr |
| 1,2,3-Propanetriol<br>56-81-5  | -  | TWA: 15 mg/m <sup>3</sup> mist, total particulate<br>TWA: 5 mg/m <sup>3</sup> mist, respirable fraction<br>(vacated) TWA: 10 mg/m <sup>3</sup> mist, total particulate<br>(vacated) TWA: 5 mg/m <sup>3</sup> mist, respirable fraction   | -  |

**Biological occupational exposure limits**

| Chemical name                  | ACGIH   |
|--------------------------------|---|
| Frits, chemicals<br>65997-18-4 | 200 µg/L - blood (Lead) - not critical<br>5 µg/g creatinine - urine (Cadmium) - not critical<br>5 µg/L - blood (Cadmium) - not critical |

**Appropriate engineering controls**

**Engineering controls**                      Showers  
    Eyewash stations  
    Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**                      No special protective equipment required.

|                                       |  |
|---------------------------------------|--|
| <b>Skin and body protection</b>       | No special protective equipment required.  |
| <b>Respiratory protection</b>         | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| <b>General hygiene considerations</b> | Handle in accordance with good industrial hygiene and safety practice.   |

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

**Physical state** Solid

**Appearance**

**Color**

**Odor**

**Odor threshold**

| <u>Property</u>                                | <u>Values</u>            | <u>Remarks • Method</u> |
|--|--------------------------|-------------------------|
| <b>pH</b>                                      | No data available        | None known              |
| <b>Melting point / freezing point</b>          | No data available        | None known              |
| <b>Initial boiling point and boiling range</b> | No data available        | None known              |
| <b>Flash point</b>                             | No data available        | None known              |
| <b>Evaporation rate</b>                        | No data available        | None known              |
| <b>Flammability</b>                            | No data available        | None known              |
| <b>Flammability Limit in Air</b>               |                          | None known              |
| <b>Upper flammability or explosive limits</b>  | No data available        |                         |
| <b>Lower flammability or explosive limits</b>  | No data available        |                         |
| <b>Vapor pressure</b>                          | No data available        | None known              |
| <b>Relative vapor density</b>                  | No data available        | None known              |
| <b>Relative density</b>                        | No data available        | None known              |
| <b>Water solubility</b>                        | No data available        | None known              |
| <b>Solubility(ies)</b>                         | No data available        | None known              |
| <b>Partition coefficient</b>                   | No data available        | None known              |
| <b>Autoignition temperature</b>                | No data available        | None known              |
| <b>Decomposition temperature</b>               |                          | None known              |
| <b>Kinematic viscosity</b>                     | No data available        | None known              |
| <b>Dynamic viscosity</b>                       | No data available        | None known              |
| <b><u>Other information</u></b>                |                          |                         |
| <b>Explosive properties</b>                    | No information available |                         |
| <b>Oxidizing properties</b>                    | No information available |                         |
| <b>VOC Content (%)</b>                         | No information available |                         |

## 10. Stability and reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                         | No information available.                 |
| <b>Chemical stability</b>                 | Stable under normal conditions.           |
| <b>Possibility of hazardous reactions</b> | None under normal processing.             |
| <b>Conditions to avoid</b>                | None known based on information supplied. |
| <b>Incompatible materials</b>             | None known based on information supplied. |
| <b>Hazardous decomposition products</b>   | None known based on information supplied. |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |   |
|---------------------|---|
| <b>Inhalation</b>   | Specific test data for the substance or mixture is not available. |
| <b>Eye contact</b>  | Specific test data for the substance or mixture is not available. |
| <b>Skin contact</b> | Specific test data for the substance or mixture is not available. |
| <b>Ingestion</b>    | May be harmful if swallowed.                                      |

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

### Acute toxicity

#### Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document

|                                      |                 |
|--------------------------------------|-----------------|
| <b>ATEmix (oral)</b>                 | 2,323.00 mg/kg  |
| <b>ATEmix (dermal)</b>               | 31,446.50 mg/kg |
| <b>ATEmix (inhalation-dust/mist)</b> | 29.60 mg/l      |

### Component Information

| Chemical name                  | Oral LD50             | Dermal LD50          | Inhalation LC50         |
|--------------------------------|-----------------------|----------------------|-------------------------|
| Kaolin<br>1332-58-7            | > 5000 mg/kg ( Rat )  | > 5000 mg/kg ( Rat ) | -                       |
| Frits, chemicals<br>65997-18-4 | > 2000 mg/kg ( Rat )  | > 2000 mg/kg ( Rat ) | -                       |
| 1,2,3-Propanetriol<br>56-81-5  | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |

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

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name                       | ACGIH          | IARC                            | NTP                             | OSHA |
|-------------------------------------|----------------|---------------------------------|---------------------------------|------|
| C.I. Pigment Green 51<br>68553-01-5 | -              | Group 3                         | -                               | -    |
| Quartz<br>14808-60-7                | A2             | Group 1                         | Known                           | X    |
| Frits, chemicals<br>65997-18-4      | A1<br>A3<br>A2 | Group 1<br>Group 2B<br>Group 2A | Known<br>Reasonably Anticipated | X    |

### Legend

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A1 - Known Human Carcinogen  
 A2 - Suspected Human Carcinogen  
 A3 - Animal Carcinogen  
**IARC (International Agency for Research on Cancer)**  
 Group 1 - Carcinogenic to Humans  
 Group 2A - Probably Carcinogenic to Humans  
 Group 2B - Possibly Carcinogenic to Humans  
 Group 3 - Not Classifiable as to Carcinogenicity in Humans  
**NTP (National Toxicology Program)**  
 Known - Known Carcinogen  
 Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen  
**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**  
 X - Present

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure.

**Target organ effects** Liver, Kidney, Respiratory system, Eyes, Skin, Central nervous system, Blood, Central Vascular System (CVS), Lungs, Nasal Cavities, Lymphatic System, prostate, Gastrointestinal tract (GI).

**Aspiration hazard** No information available.

**Other adverse effects**

**Interactive effects**

**12. Ecological information**

**Ecotoxicity** Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

| Chemical name                 | Algae/aquatic plants | Fish   | Toxicity to microorganisms | Crustacea |
|-------------------------------|----------------------|--|----------------------------|-----------|
| 1,2,3-Propanetriol<br>56-81-5 | -                    | LC50: 51 - 57mL/L (96h, Oncorhynchus mykiss) | -                          | -         |

**Persistence and degradability**

**Bioaccumulation**

**Component Information**

| Chemical name                 | Partition coefficient |
|-------------------------------|-----------------------|
| 1,2,3-Propanetriol<br>56-81-5 | -1.76                 |

**Other adverse effects** No information available.

**13. Disposal considerations**

**Disposal methods**

**Waste from residues/unused products** Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

**Contaminated packaging** Do not reuse empty containers.

**California Hazardous Waste Status** This product contains one or more substances that are listed with the State of California as a hazardous waste.

**14. Transport information**

**DOT** Not regulated

**15. Regulatory information**

**International Inventories**

**TSCA** Contact supplier for inventory compliance status.

| Chemical name                          | CAS No     | US TSCA Inventory listing | US TSCA inactive/active designation |
|--|------------|---------------------------|-------------------------------------|
| Corn syrup                             | 8029-43-4  | Present                   | Active                              |
| C.I. Pigment Green 51                  | 68553-01-5 | Present                   | Inactive                            |
| Water                                  | 7732-18-5  | Present                   | Active                              |
| Dextrin                                | 9004-53-9  | Present                   | Active                              |
| Kaolin                                 | 1332-58-7  | Present                   | Active                              |
| Quartz                                 | 14808-60-7 | Present                   | Active                              |
| Feldspar                               | 68476-25-5 | Present                   | Active                              |
| Frits, chemicals                       | 65997-18-4 | Present                   | Active                              |
| 1,2,3-Propanetriol                     | 56-81-5    | Present                   | Active                              |
| Benzoic acid, 4-hydroxy-, methyl ester | 99-76-3    | Present                   | Active                              |

**DSL/NDSL** Contact supplier for inventory compliance status.

**EINECS/ELINCS** Contact supplier for inventory compliance status.

**ENCS** Contact supplier for inventory compliance status.

**IECSC** Contact supplier for inventory compliance status.

**KECL** Contact supplier for inventory compliance status.

**PICCS** Contact supplier for inventory compliance status.

**AIIC** Contact supplier for inventory compliance status.

**NZIoC** Contact supplier for inventory compliance status.

**Legend:**  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AIIC** - Australian Inventory of Industrial Chemicals  
**NZIoC** - New Zealand Inventory of Chemicals

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name                      | SARA 313 - Threshold Values % |
|------------------------------------|-------------------------------|
| C.I. Pigment Green 51 - 68553-01-5 | 1.0                           |
| Frits, chemicals - 65997-18-4      | 0.1                           |
|                                    | 1.0                           |

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

| Chemical name                       | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|-------------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| C.I. Pigment Green 51<br>68553-01-5 | -                           | X                      | -                         | -                          |
| Frits, chemicals<br>65997-18-4      | -                           | X                      | -                         | -                          |

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations**

**U.S. State Right-to-Know Regulations**

| Chemical name                       | New Jersey | Massachusetts | Pennsylvania |
|-------------------------------------|------------|---------------|--------------|
| C.I. Pigment Green 51<br>68553-01-5 | X          | -             | X            |
| Water<br>7732-18-5                  | -          | -             | X            |
| Kaolin<br>1332-58-7                 | X          | X             | X            |
| Quartz<br>14808-60-7                | X          | X             | X            |
| Feldspar<br>68476-25-5              | X          | -             | X            |
| Frits, chemicals<br>65997-18-4      | X          | -             | X            |
| 1,2,3-Propanetriol<br>56-81-5       | X          | X             | X            |

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

|             |                             |                       |                           |                              |
|-------------|-----------------------------|-----------------------|---------------------------|------------------------------|
| <b>NFPA</b> | <b>Health hazards</b> 1     | <b>Flammability</b> 0 | <b>Instability</b> 0      | <b>Special hazards</b> -     |
| <b>HMIS</b> | <b>Health hazards</b> * 2 1 | <b>Flammability</b> 0 | <b>Physical hazards</b> 0 | <b>Personal protection</b> X |

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: Exposure controls/personal protection**

|         |                             |      |                                  |
|---------|-----------------------------|------|----------------------------------|
| TWA     | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value         | *    | Skin designation                 |

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGl(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 National Institute of Technology and Evaluation (NITE)  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

**Revision date** 01-Feb-2024

**Revision Note****Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**