

30458-4516

SAFETY DATA SHEET



Revision date 09-Nov-2022

Revision Number 1

1. Identification

Product identifier

Product Name HF-166 Orangerie

Other means of identification

Product Code(s) FG00215

Synonyms 35518A

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

| | |
|--------------------|------------|
| Skin sensitization | Category 1 |
|--------------------|------------|

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Hazard statements

Warning

H317 - May cause an allergic skin reaction

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**Physical state** Liquid**Precautionary Statements - Prevention**

Avoid breathing dust/fume/gas/mist/vapors/spray
 Contaminated work clothing must not be allowed out of the workplace
 Wear protective gloves/clothing and eye/face protection

Precautionary Statements - Response

Specific treatment (see . ? on this label)
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 Wash contaminated clothing before reuse

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

37.267 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 37.267 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 51.437 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 51.437 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 39.367 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Other information

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

3. Composition/information on ingredients

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% |
|---|------------|----------|
| Zircon, cadmium orange | 99749-34-5 | 5 - <10 |
| Quartz | 14808-60-7 | 5 - <10 |
| Limestone | 1317-65-3 | 5 - <10 |
| Zinc oxide (ZnO) | 1314-13-2 | 3 - <5 |
| Kaolin | 1332-58-7 | 1 - <3 |
| Zircon | 14940-68-2 | 1 - <3 |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | 4719-04-4 | 0.1 - 1 |

4. First-aid measures

Description of first aid measures**General advice**

Show this safety data sheet to the doctor in attendance.

Inhalation

Remove to fresh air.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.
 Consult a physician.

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Skin contact Wash with soap and water. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.

Ingestion Rinse mouth.

Most important symptoms and effects, both acute and delayed

Symptoms Itching. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. 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 Product is or contains a sensitizer. May cause sensitization by skin contact.

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 Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

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

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

8. Exposure controls/personal protection**Control parameters****Exposure Limits**

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|--------------------------------------|--|---|--|
| Zircon, cadmium orange 99749-34-5 | STEL: 10 mg/m ³ Zr TWA: 0.01 mg/m ³ Cd TWA: 0.002 mg/m ³ Cd respirable particulate matter TWA: 5 mg/m ³ Zr | TWA: 5 mg/m ³ Zr (vacated) TWA: 5 mg/m ³ Zr (vacated) STEL: 10 mg/m ³ Zr | IDLH: 9 mg/m ³ Cd dust and fume IDLH: 25 mg/m ³ Zr TWA: 5 mg/m ³ except Zirconium tetrachloride Zr STEL: 10 mg/m ³ Zr |
| Quartz 14808-60-7 | TWA: 0.025 mg/m ³ respirable particulate matter | TWA: 50 µg/m ³ (vacated) TWA: 0.1 mg/m ³ respirable dust : (250)/(%SiO ₂ + 5) mppcf TWA respirable fraction : (10)/(%SiO ₂ + 2) mg/m ³ TWA respirable fraction | IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust |
| Limestone 1317-65-3 | - | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction | TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust |
| Zinc oxide (ZnO) 1314-13-2 | STEL: 10 mg/m ³ respirable particulate matter TWA: 2 mg/m ³ respirable particulate matter | TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume | IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume |
| Kaolin 1332-58-7 | TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction | TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust |
| Zircon 14940-68-2 | STEL: 10 mg/m ³ Zr TWA: 5 mg/m ³ Zr | TWA: 5 mg/m ³ Zr (vacated) TWA: 5 mg/m ³ Zr (vacated) STEL: 10 mg/m ³ Zr | IDLH: 25 mg/m ³ Zr TWA: 5 mg/m ³ except Zirconium tetrachloride Zr STEL: 10 mg/m ³ Zr |

Biological occupational exposure limits

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| Chemical name | ACGIH |
|--------------------------------------|---|
| Zircon, cadmium orange 99749-34-5 | 5 µg/g creatinine - urine (Cadmium) - not critical 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 | Wear safety glasses with side shields (or goggles). |
| Hand protection | Wear suitable gloves. |
| Skin and body protection | Wear suitable protective clothing. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties**Information on basic physical and chemical properties**

| | |
|-----------------------|--------|
| Physical state | Liquid |
| Appearance | |
| Color | |
| Odor | |
| Odor threshold | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|--------------------------|-------------------------|
| pH | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Initial boiling point and boiling range | No data available | None known |
| Flash point | No data available | None known |
| Evaporation rate | No data available | None known |
| Flammability | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | No data available | None known |
| Relative vapor density | No data available | None known |
| Relative density | No data available | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | 410 °C / 770 °F | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Other information | | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |
| VOC Content (%) | No information available | |

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10. Stability and reactivity

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

11. Toxicological information**Information on likely routes of exposure****Product Information**

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. |
| Eye contact | Specific test data for the substance or mixture is not available. |
| Skin contact | May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). |
| Ingestion | May be harmful if swallowed. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|-------------------------|
| Symptoms | Itching. Rashes. Hives. |
|-----------------|-------------------------|

Acute toxicity**Numerical measures of toxicity**

No information available

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

| | |
|--------------------------------------|----------------|
| ATEmix (oral) | 3,690.20 mg/kg |
| ATEmix (dermal) | 6,484.30 mg/kg |
| ATEmix (inhalation-dust/mist) | 10.10 mg/l |

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 39.367 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|----------------------|----------------------|--|
| Zinc oxide (ZnO) 1314-13-2 | > 5000 mg/kg (Rat) | > 2000 mg/kg (Rat) | > 5700 mg/m ³ (Rat) 4 h |
| Kaolin 1332-58-7 | > 5000 mg/kg (Rat) | > 5000 mg/kg (Rat) | - |
| 1,3,5-Triazine-1,3,5-(2H,4H,6H)-triethanol 4719-04-4 | = 763 mg/kg (Rat) | > 4000 mg/kg (Rat) | = 0.4 mg/L (Rat) 4 h = 0.338 mg/L (Rat) 4 h |

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

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| | |
|--|--------------------------------------|
| Skin corrosion/irritation | No information available. |
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | May cause an allergic skin reaction. |
| 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 |
|--------------------------------------|-------|---------|-------|------|
| Zircon, cadmium orange 99749-34-5 | A2 | Group 1 | Known | X |
| Quartz 14808-60-7 | A2 | Group 1 | Known | X |

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

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP (National Toxicology Program)

Known - Known 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 | No information available. |
| Target organ effects | Kidney, Respiratory system, Eyes, Skin, Blood, Lungs, prostate, Gastrointestinal tract (GI). |
| Aspiration hazard | No information available. |
| Other adverse effects | |
| Interactive effects | |

12. Ecological information**Ecotoxicity** Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--|----------------------|--|----------------------------|-----------|
| Zinc oxide (ZnO) 1314-13-2 | - | LC50: =1.55mg/L (96h, Danio rerio) | - | - |
| 1,3,5-Triazine-1,3,5(2H,4 H,6H)-triethanol 4719-04-4 | - | LC50: =16.07mg/L (96h, Danio rerio) | - | - |

FG00215 - HF-166 Orangerie**Revision date** 09-Nov-2022**Persistence and degradability****Bioaccumulation** There is no data for this product.**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**UN number or ID number** UN3082
Packing group III**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 |
|--|------------|---------------------------|-------------------------------------|
| Water | 7732-18-5 | Present | Active |
| Feldspar | 68476-25-5 | Present | Active |
| Zircon, cadmium orange | 99749-34-5 | - | Unknown * |
| Quartz | 14808-60-7 | Present | Active |
| Limestone | 1317-65-3 | Present | Active |
| Zinc oxide (ZnO) | 1314-13-2 | Present | Active |
| Kaolin | 1332-58-7 | Present | Active |
| Zircon | 14940-68-2 | Present | Active |
| Smectite-group minerals | 12199-37-0 | Present | Active |
| Sodium carboxymethyl cellulose | 9004-32-4 | Present | Active |
| D-gluco-Heptonic acid, monosodium salt, (2.xi.)- | 31138-65-5 | Present | Active |
| 1,3,5-Triazine-1,3,5(2H,4H,6H)-triethanol | 4719-04-4 | Present | Active |

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| Chemical name | CAS No | US TSCA Inventory listing | US TSCA inactive/active designation |
|---------------|----------|---------------------------|-------------------------------------|
| Ethanolamine | 141-43-5 | Present | Active |

*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

DSL/NDL 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/NDL - 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 % |
|-------------------------------------|-------------------------------|
| Zircon, cadmium orange - 99749-34-5 | 0.1 |
| Zinc oxide (ZnO) - 1314-13-2 | 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 |
|--------------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Zircon, cadmium orange 99749-34-5 | - | X | - | - |
| Zinc oxide (ZnO) 1314-13-2 | - | 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**

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| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------------|------------|---------------|--------------|
| Water 7732-18-5 | - | - | X |
| Feldspar 68476-25-5 | X | - | X |
| Zircon, cadmium orange 99749-34-5 | X | - | X |
| Quartz 14808-60-7 | X | X | X |
| Limestone 1317-65-3 | X | X | X |
| Zinc oxide (ZnO) 1314-13-2 | X | X | X |
| Kaolin 1332-58-7 | X | X | X |
| Ethanolamine 141-43-5 | X | X | X |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

| | | | | |
|-------------|-------------------------|-----------------------|---------------------------|------------------------------|
| NFPA | Health hazards 2 | Flammability 1 | Instability 0 | Special hazards - |
| HMIS | Health hazards 2 | Flammability 1 | Physical hazards 0 | Personal protection 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

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Revision Note**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the

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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