

30415-XXXX

MATERIAL SAFETY DATA SHEET

LEAD FREE /SMUG 408,9 & 10

* SETS 108, 109, 110, 111 *

PRODUCT NAME: M1 LEAD FREE /SMUG 408,9 & 10
PRODUCT CODE: LUG SERIES (2)

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: AMERICAN ART CLAY CO., INC.
ADDRESS : 4717 WEST 16TH STREET
INDIANAPOLIS, IN 46222

EMERGENCY PHONE : 800-374-1600 DATE PRINTED : 04/19/99
INFORMATION PHONE : 800-374-1600 NAME OF PREPARER : L. Jenkins

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

Table with 4 columns: REPORTABLE COMPONENTS, CAS NUMBER, VAPOR PRESSURE (mm Hg @ TEMP), WEIGHT PERCENT. Rows include ALUMINUM SILICATE, LILAC GLAZE STAIN, and E.P.K. CLAY.

*** No toxic chemical(s) subject to the reporting requirements of Sect 313 of Title III and of 40 CFR 372 are present.***
No hazardous ingredients. Carries the AP Seal. Labeling conforms to ASTM D4236

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE: n/a SPECIFIC GRAVITY (H2O=1): 0.18
VAPOR DENSITY: Heavier than air. EVAPORATION RATE: NA
COATING V.O.C.: 0.00 lb/gl MATERIAL V.O.C.: 0.00 lb/gl
SOLUBILITY IN WATER: Yes.
APPEARANCE AND ODOR: LUG 30 - SMUG SETS 408,9 & 10 EXCEPT BLACK, MED. BLUE & I BLUE. - UG PAN SETS 108, 109, 110 & 111 excluding - Dk. Blue, Med. Blue, Black Electric Blue, Lt. Red, Red & Real Orange.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: n/a METHOD USED: n/a
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: n/a UPPER: n/a

EXTINGUISHING MEDIA: N/A

SPECIAL FIREFIGHTING PROCEDURES

No fire hazard.

UNUSUAL FIRE AND EXPLOSION HAZARDS

None.

SECTION V - REACTIVITY DATA

ABILITY: Stable.
CONDITIONS TO AVOID
None.

INCOMPATIBILITY (MATERIALS TO AVOID)

Item Numbers: 30415-1009, 30415-1019, 30415-1088, 30415-1099, 30415-3060, 30415-3170, 30415-3350, 30415-4000, 30415-4310, 30415-6000, 30415-6030, 30415-7910

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HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Will not occur.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

None

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Rinse eyes thoroughly with water for 15 minutes. Contact physician.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

None.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

No hazardous ingredients.

HEALTH HAZARDS (ACUTE AND CHRONIC)

No hazardous ingredients.

CARCINOGENICITY: NTP CARCINOGEN: No. IARC MONOGRAPHS: No. OSHA REGULATED: N

ADDITIONAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

UNKNOWN.

EMERGENCY AND FIRST AID PROCEDURES

Contact your local poison control for further health information.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Clean with paper towel and wet sponge. Wash with soap and water. Do not create dust. Damp mop after use. Cleaning should be on routine basis.

WASTE DISPOSAL METHOD

Dispose of paper towel in trash and rinse sponge. In manufacturing, dispose of in accordance to local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Always keep lid tightly on jar of moist product while not in use or storage. Uncovered product will dry out.

OTHER PRECAUTIONS

None. IMPORTANT NOTE: Pigments used in this product are formed at high temperature calcination. Frits are produced from the chemical reactions which occur during high temperature smelting of various raw materials to form a molten glass. This glass is rapidly cooled to produce granules or flakes. These may subsequently be milled to produce powdered frit. Frit (glass) is an essentially insoluble substance. Therefore pigments/frits do not necessarily have any of the properties of the components oxides or metals.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION

When spraying or mixing dry glaze, use a NIOSH certified mask for dust or mist. Not needed for brush or sponge application.

VENTILATION

Item Numbers: 30415-1009, 30415-1019, 30415-1088, 30415-1099, 30415-3060, 30415-3170, 30415-3350, 30415-4000, 30415-4310, 30415-6000, 30415-6030, 30415-7910

M A T E R I A L S A F E T Y D A T A S H E E T
M1 LEAD FREE /SMUG 408,9 & 10

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needed.

PROTECTIVE GLOVES

EYE PROTECTION

Not needed.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Not needed.

WORK/HYGIENIC PRACTICES

Refer to AMACO Safety Manual for further information. Manual available upon request.

===== SECTION IX - DISCLAIMER =====

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Since conditions of use are beyond our control we make no warranties, expressed or implied, except those that may be contained in our written acknowledgement.

M A T E R I A L S A F E T Y D A T A S H E E T

M1 SET 111 - RED, LT. RED & REAL ORANGE

Page:

PRODUCT NAME: M1 SET 111 - RED, LT. RED & REAL ORANGE
 PRODUCT CODE: LUG (4)

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: AMERICAN ART CLAY CO., INC.
 ADDRESS : 4717 WEST 16TH STREET
 INDIANAPOLIS, IN
 46222

EMERGENCY PHONE : 800-374-1600 DATE PRINTED : 04/19/99
 INFORMATION PHONE : 800-374-1600 NAME OF PREPARER : L. Jenkins

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
FLINT	14808-60-7		6.47
QUARTZ: ACGIH TLV .1MG/M3, OSHA PEL .1MG/M3 @ Respirable Dust			
E.P.K. CLAY	1332-58-7		6.47
KAOLIN - ACGIH TLV 2mg/m3, OSHA PEL 10 mg/m3 @ DUST			

*** No toxic chemical(s) subject to the reporting requirements of Sect 313 of Title III and of 40 CFR 372 are present.***
 This product carries the "AP" non-toxic seal. Labeling conforms to ASTM D 4236. Contains cadmium pigment (encapsulated).

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: n/a SPECIFIC GRAVITY (H2O=1): 0.18
 VAPOR DENSITY: Heavier than air. EVAPORATION RATE: NA
 COATING V.O.C.: 0.00 lb/gl MATERIAL V.O.C.: 0.00 lb/gl
 SOLUBILITY IN WATER: Yes.
 APPEARANCE AND ODOR: LT. RED, RED & REAL ORANGE

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: n/a METHOD USED: n/a
 FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: n/a UPPER: n/a

EXTINGUISHING MEDIA: N/A

SPECIAL FIREFIGHTING PROCEDURES
 No fire hazard.

UNUSUAL FIRE AND EXPLOSION HAZARDS
 None.

===== SECTION V - REACTIVITY DATA =====

STABILITY: Stable.
 CONDITIONS TO AVOID
 None.

COMPATIBILITY (MATERIALS TO AVOID)
 None.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS
 Will not occur.

Item Numbers: 30415-1009, 30415-1019, 30415-1088, 30415-1099, 30415-3060, 30415-3170, 30415-3350, 30415-4000, 30415-4310, 30415-6000, 30415-6030, 30415-7910

M A T E R I A L S A F E T Y D A T A S H E E T

ML SET 111 - RED, LT. RED & REAL ORANGE

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HAZARDOUS POLYMERIZATION: Will not occur.

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SECTION VI - HEALTH HAZARD DATA
=====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

May cause damage to the lungs by inhalation of dust or mist. Possible cancer agent based on laboratory tests. Contains cadmium pigment (encapsulated) and crystalline silica. Not for spray application. Refer to Health Hazards (Acute and Chronic) for further health information.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Rinse eyes thoroughly with water for 15 minutes. Contact physician.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

None.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

AP Non-toxic product. Reference Health Hazards (Acute and Chronic) for further health information.

HEALTH HAZARDS (ACUTE AND CHRONIC)

May cause damage to the lungs by inhalation of dust or mist. Cancer agent by inhalation based on laboratory tests. In moist form non-hazardous. WARNING: Detectable amounts of chemical known to the State of California to cause cancer, birth defects, or other reproductive harm may be found in this product. (Prop. 65 California Health & Safety code section 25249.6 ET. SEQ.) Dry clays.

CARCINOGENICITY: NTP CARCINOGEN: No. IARC MONOGRAPHS: Yes. OSHA REGULATED: N

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Unknown.

EMERGENCY AND FIRST AID PROCEDURES

Contact your local poison control for further health information.

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SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE
=====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Clean with paper towel and wet sponge. Wash with soap and water. Do not create dust. Damp mop after use. Cleaning should be on routine basis.

WASTE DISPOSAL METHOD

Dispose of paper towel in trash and rinse sponge. In manufacturing, dispose of in accordance to local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Always keep lid tightly on jar of moist product while not in use or storage. Uncovered product will dry out.

OTHER PRECAUTIONS

Do not breathe dust or mist. IMPORTANT NOTE: Pigments used in this product are formed at high temperature calcination. Frits are produced from the chemical reactions which occur during high temperature smelting of various raw materials to form a molten glass. This glass is rapidly cooled to produce granules or flakes. These may subsequently be milled to produce a powdered frit. Frit (glass) is an essentially insoluble substance. Therefore, pigments / frits do not necessarily have any of the properties of the components oxides or metals.

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SECTION VIII - CONTROL MEASURES
=====

RESPIRATORY PROTECTION

Not needed for normal application (brush or sponge). This product is not for spray application.

M A T E R I A L S A F E T Y D A T A S H E E T

M1 SET 111 - RED, LT. RED & REAL ORANGE

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VENTILATION

Not needed for brush or sponge application. Not for spray application.

PROTECTIVE GLOVES

Not needed.

EYE PROTECTION

Not needed.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Not needed.

WORK/HYGIENIC PRACTICES

Refer to AMACO Safety Manual for further information. Manual available upon request.

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M A T E R I A L S A F E T Y D A T A S H E E T
M2 COBALT/ SILICA / LEAD FREE SMUG DK.BL

Page:

PRODUCT NAME: M2 COBALT/ SILICA / LEAD FREE SMUG DK.BL
PRODUCT CODE: LUG SERIES (3)

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: AMERICAN ART CLAY CO., INC.
ADDRESS : 4717 WEST 16TH STREET
INDIANAPOLIS, IN 46222
EMERGENCY PHONE : 800-374-1600 DATE PRINTED : 04/19/99
INFORMATION PHONE : 800-374-1600 NAME OF PREPARER : L. Jenkins

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE mm Hg @ 25°C	WEIGHT PERCENT
COBALT ALUMINATE BLUE SPINEL	1345-16-0		8.23
COBALT OXIDE - ACGIH TLV .020MG/M3, OSHA PEL .050MG/M3 @ CO			
FLINT	14808-60-7		7.46
QUARTZ: ACGIH TLV .1MG/M3, OSHA PEL .1MG/M3 @ Respirable Dust			

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372 are present. Bears to the HL Seal. Labeling conforms to ASTM D4236. Contains soluble cobalt. See Section VI. Producers are responsible in complying with FDA guidelines for lead release from tableware.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE: n/a SPECIFIC GRAVITY (H2O=1): 0.18
VAPOR DENSITY: Heavier than air. EVAPORATION RATE: NA
COATING V.O.C.: 0.00 lb/gl MATERIAL V.O.C.: 0.00 lb/gl
SOLUBILITY IN WATER: Yes.
APPEARANCE AND ODOR: LUG 21, 22 & 55 - SMUG DK. BLUE, MED. BLUE & BLACK. - UG
PAN Colors: Med. Blue, Black & Dk. Blue;

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: n/a METHOD USED: n/a
FLAMMABLE LIMITS IN AIR BY VOLUME-- LOWER: n/a UPPER: n/a

EXTINGUISHING MEDIA: N/A

SPECIAL FIREFIGHTING PROCEDURES
No fire hazard.

UNUSUAL FIRE AND EXPLOSION HAZARDS
None.

SECTION V - REACTIVITY DATA

STABILITY: Stable.
CONDITIONS TO AVOID

INCOMPATIBILITY (MATERIALS TO AVOID)
None.

M A T E R I A L S A F E T Y D A T A S H E E T

M2 COBALT/ SILICA / LEAD FREE SMUG DK.BL

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HAZARDOUS DECOMPOSITION OR BYPRODUCTS
None occur.

HAZARDOUS POLYMERIZATION: Will not occur.

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Inhalation exposure may cause respiratory allergies (cobalt). May cause damage to the heart or lungs. Refer to Health Hazards (Acute and Chronic) for further health information. Not for spray application.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Rinse eyes thoroughly with water for 15 minutes. Contact physician.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

None.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Carries the HL seal. If swallowed may cause damage to the heart and lungs. Labeling conforms to ASTM D-4236. TLV has not been established for the whole product.

HEALTH HAZARDS (ACUTE AND CHRONIC)

May cause damage to the lungs by inhalation of dust or mist. Cancer agent by inhalation based on laboratory tests. In moist form non-hazardous. WARNING: Detectable amounts of chemical known to the State of California to cause cancer, birth defects, or other reproductive harm may be found in this product. (Prop. 65 California Health & Safety code section 25249.6 ET. SEQ.) Dry clays.

MUTAGENICITY: NTP CARCINOGEN: No. IARC MONOGRAPHS: Yes. OSHA REGULATED: N

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Unknown.

EMERGENCY AND FIRST AID PROCEDURES

Contact your local poison control for further health information.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Clean with paper towel and wet sponge. Wash with soap and water. Do not create dust. Damp mop after use. Cleaning should be on routine basis.

WASTE DISPOSAL METHOD

Dispose of paper towel in trash and rinse sponge. In manufacturing, dispose of in accordance to local, state and federal regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Always keep lid tightly on jar of moist product while not in use or storage. Uncovered product will dry out.

OTHER PRECAUTIONS

None. IMPORTANT NOTE: Pigments used in this product are formed at high temperature calcination. Frits are produced from the chemical reactions which occur during high temperature smelting of various raw materials to form a molten glass. This glass is rapidly cooled to produce granules or flakes. These may subsequently be milled to produce powdered frit. Frit (glass) is an essentially insoluble substance. Therefore pigments/frits do not necessarily have any of the properties of the components oxides or metals.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

Not needed for normal applications (brush or sponge). This product is not for spray application.

M A T E R I A L S A F E T Y D A T A S H E E T
M2 COBALT/ SILICA / LEAD FREE SMUG DK.BL

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VENTILATION

Not needed.

PROTECTIVE GLOVES

Not needed.

EYE PROTECTION

Not needed.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

Not needed.

WORK/HYGIENIC PRACTICES

Refer to AMACO Safety Manual for further information. Manual available upon request.

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