MATERIAL SAFETY DATA SHEET M1 UNDERGLAZE CHALK CRAYONS Page: 1 PRODUCT NAME: M1 UNDERGLAZE CHALK CRAYONS PRODUCT CODE: UG CRAYONS (1) Raud Jan 2002 MANUFACTURER'S NAME: AMERICAN ART CLAY CO., INC. ADDRESS : 4717 WEST 16TH STREET INDIANAPOLIS, IN 46222 EMERGENCY PHONE : 800-374-1600 DATE PRINTED : 01/08/02 INFORMATION PHONE : 800-374-1600 NAME OF PREPARER : L. Jenkins ====== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION ======= REPORTABLE COMPONENTS VAPOR PRESSURE WEIGHT CAS NUMBER E.P.K. CLAY 1332-58-7 KAOLIN - ACGIH TLV 2mg/m3, OSHA PEL 10 mg/m3 @ DUST 14808-60-7 QUARTZ: ACGIH TLV .1MG/M3, OSHA PEL .1MG/M3 @ Respirable Dust . 16.51 GEORGIA KAOLIN 1332-58-7 KAOLIN - ACGIH TLV 2mg/m3, OSHA PEL 10 mg/m3 @ DUST 16.51 Bears the AP Seal, Labeling conforms to ASTM D4236. Exposure may cause damage to the lungs. Cancer agent by inhalation based on laboratory tests. Contains crystalline silica. See Section VI. ======== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS ========= BOILING RANGE: n/a VAPOR DENSITY: Heavier than air. SPECIFIC GRAVITY (H2O=1): 0.18 EVAPORATION RATE: NA COATING V.O.C.: 0.00 lb/gl MATERIAL V.O.C.: 0.00 lb/ql SOLUBILITY IN WATER: Yes. APPEARANCE AND ODOR: ALL CHALKS EXCEPT DK. BLUE & MED. BLUE 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.

STABILITY: Stable. CONDITIONS TO AVOID None.

INCOMPATIBILITY (MATERIALS TO AVOID)

None.

MATERIAL SAFETY DATA SHEET M1 UNDERGLAZE CHALK CRAYONS

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Will not occur.

HAZARDOUS POLYMERIZATION: Will not occur.

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

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

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE No hazardous ingredients.

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: Yes. IARC MONOGRAPHS: Yes. OSHA REGULATED: No.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

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 Specific steps not necessary.

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

Store in cool dry place, away from moisture.

OTHER PRECAUTIONS

None. IMPORTANT NOTE: Pigments used in this product are formed at high temperature calcination. Prits 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 granuales 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.

RESPIRATORY PROTECTION

Not needed.

VENTILATION

Not needed.

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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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MATERIAL SAFETY DATA SHEET M2 UNDERGLAZE CHALK CRAYONS

PRODUCT NAME: M2 UNDERGLAZE CHALK CRAYONS

PRODUCT CODE: UG CRAYONS (2)

MANUFACTURER'S NAME: AMERICAN ART CLAY CO., INC.

ADDRESS

: 4717 WEST 16TH STREET

INDIANAPOLIS, IN 46222

EMERGENCY PHONE : 800-374-1600

DATE PRINTED : 01/08/02

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INFORMATION PHONE : 800-374-1600

NAME OF PREPARER : L. Jenkins

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

VAPOR PRESSURE WEIGHT REPORTABLE COMPONENTS CAS NUMBER mm Hg @ TEMP COBALT SILICATE BLUE OLIVINE COBALT - ACGIH TLV .02MG/M3, OSHA PEL .10MG/M3 @ CO KAOLIN - ACCIH TLV 2MG/M3 @ DUST E.P.E. CLAY 1332-58-7 1.88 KAOLIN - ACGIH TLV 2mg/m3, OSHA PEL 10 mg/m3 @ DUST 14808-60-7 1.56 QUARTZ: ACGIH TLV .1MG/M3, OSHA PEL .1MG/M3 @ Respirable Dust GEORGIA KAOLIN 1332-58-7 1.56 KAOLIN - ACGIH TLV 2mg/m3, OSHA PEL 10 mg/m3 @ DUST

This product carries the HL Seal. Labeling conforms to ASTM D4236. Contains soluble cobalt. See Section VI.

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

BOILING RANGE: n/a

SPECIFIC GRAVITY (H2O=1): 0.18

VAPOR DENSITY: Heavier than air. COATING V.O.C.: 0.00 lb/gl

EVAPORATION RATE: NA

SOLUBILITY IN WATER: Yes.

MATERIAL V.O.C.: 0.00 lb/gl

APPEARANCE AND ODOR: DK. BLUE & MED. BLUE (ONLY)

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.

STABILITY: Stable. CONDITIONS TO AVOID

INCOMPATIBILITY (MATERIALS TO AVOID)

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None.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

Will not occur.

HAZARDOUS POLYMERIZATION: Will not occur.

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

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 heart and lungs by ingestion or inhalation of (Black or Dark Blue).

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

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

Specific steps not necessary.

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

Store in cool dry place, away from moisture.

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 granuales 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.

RESPIRATORY PROTECTION

Not needed.

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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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