

# MATERIAL SAFETY DATA SHEET

## SECTION I PREPARATION AND PRODUCT INFORMATION

MANUFACTURER: THE POTTERY SUPPLY HOUSE LTD.  
ADDRESS: 1120 SPEERS ROAD  
OAKVILLE, ONTARIO L6L 2X4  
SUPPLIER: THE POTTERY SUPPLY HOUSE LTD. TEL: 1 800 465-8544  
ADDRESS: 1120 SPEERS ROAD 905 849-5540  
OAKVILLE, ONTARIO L6L 3X4 FAX: 905 849-0001  
MATERIAL NAME: **CLAY BODY No. 536**  
MATERIAL USE: A MOIST STONEWARE CLAY FOR MODELING AND POTTING

## SECTION II HAZARDOUS INGREDIENTS

| INGREDIENT   | %           | C.A.S.#                                | LD50                 | LC50                 |
|--|-------------|--|----------------------|----------------------|
| CRYSTALLINE SILICA,<br>COMBINED: QUARTZ<br>CRISTOBALITE<br>TRIDYMITE | 20.9 - 29.9 | 14808-60-7<br>14464-46-1<br>15468-32-3 | N.A.<br>N.A.<br>N.A. | N.A.<br>N.A.<br>N.A. |
| MANGANESE DIOXIDE*   | 0.7 - 0.8   | 1313-13-9                              | N.A.                 | N.A.                 |

\*THE MAJOR CONSTITUENT OF THE CLAY BODY INGREDIENT, MANGANESE ORE. THE CONCENTRATION OF MANGANESE ORE AND MANGANESE DIOXIDE IN THIS CLAY BODY IS BELOW THE MSDS REQUIRED DISCLOSURE LEVEL (1%).

## SECTION III PHYSICAL DATA

PHYSICAL STATE: MIXED PHASE, APPROX. 80% SOLID (SILICATE MINERALS), 20% LIQUID (WATER)  
ODOUR / APPEARANCE: GREY, WITH EARTHY ODOUR  
ODOUR THRESHOLD: NOT AVAILABLE  
SPECIFIC GRAVITY: NOT AVAILABLE  
VAPOUR PRESSURE: NOT AVAILABLE  
VAPOUR DENSITY: NOT AVAILABLE  
EVAPORATION RATE: NOT AVAILABLE  
BOILING POINT: NOT AVAILABLE  
FREEZING POINT: APPROXIMATELY 0° C (WATER)  
PH: NOT AVAILABLE  
COEFF. WATER/OIL  
DISTRIBUTION: NOT AVAILABLE

## SECTION IV FIRE OR EXPLOSION HAZARD

CONDITIONS OF FLAMMABILITY: NOT FLAMMABLE  
MEANS OF EXTINCTION: NOT APPLICABLE  
FLASHPOINT, METHOD OF DETERMINATION: NOT APPLICABLE  
UPPER FLAMMABLE LIMIT: NOT APPLICABLE  
LOWER FLAMMABLE LIMIT: NOT APPLICABLE  
AUTO-IGNITION TEMPERATURE: NOT APPLICABLE  
HAZARDOUS COMBUSTION PRODUCTS: MAY LIBERATE CARBON MONOXIDE, CARBON DIOXIDE AND SULPHUR DIOXIDE.  
EXPLOSION DATA,  
SENSITIVITY TO MECHANICAL IMPACT: NONE  
SENSITIVITY TO STATIC DISCHARGE: NONE

## SECTION V REACTIVITY DATA

CONDITIONS UNDER WHICH PRODUCT IS CHEMICALLY UNSTABLE: NONE KNOWN  
NAME OF INCOMPATIBLE SUBSTANCES: POWERFUL OXIDIZING AGENTS SUCH AS FLUORINE, CHLORINE TRIFLUORIDE AND OXYGEN DIFLUORIDE. MANGANESE MINERAL ORE IS INCOMPATIBLE WITH EASILY OXIDIZABLE SUBSTANCES SUCH AS SULPHUR, SULFIDES, PHOSPHIDES, ETC.  
CONDITIONS OF REACTIVITY: NONE KNOWN.  
HAZARDOUS DECOMPOSITION PRODUCTS: WHEN HEATED ABOVE 260°C, SO<sub>2</sub>, CO AND CO<sub>2</sub> GASES ARE RELEASED. MANGANESE FUMES MAY BE RELEASED WHEN HEATED TO THE MATURING TEMPERATURE OF THE CLAY (1200°C).

## SECTION VI TOXICOLOGICAL PROPERTIES

|   |                  |  |
|---|------------------|--|
| ROUTE OF ENTRY  | SKIN ABSORPTION: | NONE   |
|   | EYE CONTACT:     | DRY CLAY DUST MAY CAUSE ABRASION OF THE CORNEA.  |
|   | INHALATION:      | MAY CAUSE DAMAGE TO THE LUNGS BY INHALATION OF DUST.   |
|   | INGESTION:       | UNLIKELY TO BE TOXIC BY INGESTION. INFORMATION IS UNAVAILABLE CONCERNING POSSIBLE HAZARDS ARISING FROM INGESTING LOW LEVELS OF MANGANESE ORE. AS A PRECAUTION, THIS CLAY IS NOT RECOMMENDED FOR USE BY YOUNG CHILDREN WITHOUT ADULT SUPERVISION.   |
| EFFECTS OF ACUTE EXPOSURE:  |                  | MAY CAUSE DRYING AND REDDENING OF THE SKIN. MAY CAUSE EYE IRRITATION.  |
| EFFECTS OF CHRONIC EXPOSURE:                                      |                  | OVEREXPOSURE TO RESPIRABLE CRYSTALLINE SILICA DUST MAY CAUSE:<br>1/ SILICOSIS, A FORM OF PROGRESSIVE PULMONARY FIBROSIS.<br>2/ SCLERODERMA, AN IMMUNE SYSTEM DISORDER MANIFESTED BY A FIBROSIS OF THE LUNGS, SKIN AND OTHER INTERNAL ORGANS.<br>SILICOSIS INCREASES THE RISK OF TUBERCULOSIS.<br>RECENT EVIDENCE SUGGESTS AN ASSOCIATION BETWEEN RESPIRABLE EXPOSURE AND A HIGHER INCIDENCE OF KIDNEY LESIONS.<br>CRYSTALLINE SILICA INHALED FROM OCCUPATIONAL SOURCES IS CLASSIFIED (IARC) AS CARCINOGENIC TO HUMANS.<br>PROLONGED EXPOSURE TO HIGH LEVELS OF RESPIRABLE MANGANESE MAY ADVERSELY AFFECT THE CENTRAL NERVOUS SYSTEM. ASTHMA, PNEUMONIA, AND SUSCEPTIBILITY TO INFECTION HAVE BEEN ASSOCIATED WITH EXPOSURE TO RESPIRABLE MANGANESE DUST. |
| EXPOSURE LIMITS - TIME WEIGHTED AVERAGE EXPOSURE VALUES (TWA EV): |                  | SILICA, QUARTZ 0.1 mg./m <sup>3</sup><br>SILICA, CRISTOBALITE 0.05 mg./m <sup>3</sup><br>SILICA, TRIDYMIT 0.05 mg./m <sup>3</sup><br>MANGANESE DIOXIDE 5.0 mg./m <sup>3</sup>  |
| IRRITANCY OF PRODUCT:   |                  | REFER TO ROUTE OF ENTRY  |
| SENSITIZATION OF PRODUCT:   |                  | NO KNOWN EFFECTS   |
| CARCINOGENICITY OF PRODUCT:                                       |                  | REFER TO CHRONIC EFFECTS. THIS PRODUCT IS FORMULATED WITH BALL CLAY CONTAINING TRACE AMOUNTS (A FEW PARTS PER TRILLION TO 3 PARTS PER BILLION) OF 2,3,7,8-TCDD (DIOXIN), A KNOWN (IARC) HUMAN CARCINOGEN.  |
| TERATOGENICITY OF PRODUCT:  |                  | NO KNOWN EFFECTS   |
| MUTAGENICITY OF PRODUCT:  |                  | NO KNOWN EFFECTS   |
| SYNERGISTIC MATERIALS:  |                  | NONE KNOWN   |

## SECTION VII PREVENTATIVE MEASURES

|   |  |
|---|--|
| PERSONAL PROTECTIVE EQUIPMENT TO BE USED:   | AN APPROVED RESPIRATOR AND PROTECTIVE EYE WEAR SHOULD BE WORN WHENEVER THE TOOLING, CRUSHING OR GRINDING OF DRIED CLAY OBJECTS GIVES RISE TO RESPIRABLE DUST. INDIVIDUALS WHO ARE PARTICULARLY SENSITIVE TO THE SKIN-DRYING EFFECTS OF CLAY SHOULD WEAR PROTECTIVE LATEX GLOVES. |
| ENGINEERING CONTROLS TO BE USED:            | IF RESPIRABLE DUST IS RAISED, PROVISION SHOULD BE MADE FOR ADEQUATE LOCAL EXHAUST. WHEN FIRING, USE A DOWNDRAFT OR OVERHEAD HOOD-TYPE EXHAUST  |
| PROCEDURES TO BE FOLLOWED IN CASE OF SPILL: | NOT APPLICABLE   |
| WASTE DISPOSAL:                             | IN ACCORDANCE WITH LOCAL, PROVINCIAL AND FEDERAL LAWS. NOT A HAZARDOUS WASTE.  |
| HANDLING PROCEDURES:                        | NONE REQUIRED.   |
| STORAGE REQUIREMENTS:                       | NONE   |
| SPECIAL SHIPPING INFORMATION:               | NONE   |

## SECTION VIII FIRST AID MEASURES

|                |   |
|----------------|---|
| EYE EXPOSURE:  | FLUSH THOROUGHLY WITH WATER. SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS.   |
| SKIN EXPOSURE: | WASH THOROUGHLY AND APPLY MOISTURIZING HANDCREAM TO DRIED, REDDENED SKIN.   |
| INGESTION:     | UNLIKELY TO REQUIRE TREATMENT. FOR MASSIVE INGESTION, SEEK MEDICAL ATTENTION.   |
| INHALATION:    | NO SPECIFIC FIRST AID IS NECESSARY SINCE THE ADVERSE HEALTH EFFECTS ASSOCIATED WITH EXPOSURE TO CRYSTALLINE SILICA RESULT FROM CHRONIC EXPOSURES. |

## SECTION IX PREPARATION INFORMATION

MSDS PREPARED BY: JON WALLS  
PREPARATION DATE: NOVEMBER 10, 2009

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