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MATERIAL SAFETY DATA SHEET

PRODUCT/MATERIAL Kaolin Clay

MANUFACTURER/DISTRIBUTOR TKB Trading LLC,

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SECTION II - INFORMATION ON INCREDIENTS

CHEMICAL NAME HYDRATED ALLMINUM SILICATE

SYNONMS KAOLIN CLAY
CAS NUMBER 1332-58 7

KAOLIN IS A NATURALLY OCCURRING SUBSTANCE CONTAINING MANY INCREDIENTS IN SMALL BUT VARYING AMOUNTS.

SECTION III - HAZARDS IDENTIFICATION

INHALABLE SILICA IS NOT EXPECTED TO BE PRESENT IN THE DUST FROM THIS PRODUCT AT LEVELS EXCEEDING 1%. IF LEVELS ABOVE 1% ARE DETECTED THEN ADDITIONAL RESPIRATORY PROTECTIVE MEASURES SHOULD BE TAKEN. CRYSTALLINE SILICA IS LISTED WITH JARC AS A CLASS 1 CARCINOGEN AND WITH NTP AS A SUBSTANCE REASONABLY ANTICIPATED TO BE A CARCINOGEN.

ROUTE OF EXPOSURE:

SKIN CONTACT - NON-HAZARIJUS
SKIN ABSORPTION - NON-HAZARIJUS
EYE CONTACT - NUISANCE DUST
INCESTION - NON-HAZARIJUS

INHALATION - TOTAL DUST (UNDER 1.0% TOTAL QUARTZ)

KAOLIN: TLV = 10 mg/cu.m. OF TOTAL DUST(ACGIH)

PEL = 29 CFR 1910.1000; TABLES Z 1 AND Z-3 (OSHA)

TOTAL OUST (OVER 1.0% TOTAL QUARTZ)

RESPIRABLE QUARTZ NOT TO EXCEED TLV OF $0.05\ \text{mg/cu.m.}$ IN THE RESPIRABLE DUST.

PEL = 29 CPR 1910.1000; TABLES Z-1 AND Z-3, (OSHA)

NOTE: SOURCE - OSHA 29 CFR 1910.1000 TABLE Z-1-A, ACGIH TLV'S FOR CHEMICAL SUBSTANCES. TO THE BEST OF OUR KNOWLEDGE, NO STUDIES HAVE BEEN DONE ON EYE, SKIN, OR INGESTION HAZARDS.

SECTION IV - FIRST AID MEASURES

EYE AND SKIN: NO SPECIAL PRECAUTIONS; FLUSH WITH WATER. INHALATION AND INCESTION: NO SPECIAL PRECAUTIONS.

SECTION V - FIRE-FIGHTING MEASURES

FLASHPOINT: NONE AUTOIGNITION TEMPERATURE: NONE FLAMMABLE LIMITS IN AIR: NOT APPLICABLE EXTINGUISHING MEDIA: NOT APPLICABLE

SPECIAL FIRE FIGHTING PROCEDURES: KAOLIN IS NOT A FIRE HAZARD OR AN EXPLOSIVE HAZARD IN EITHER THE POWDER OR SLURRY FORM.

SECTION VI - ACCIDENTAL RELEASE MEASURES

PROCEDURE WHEN MATERIAL IS RELEASED OR SPILLED: NOT A "TOXIC POLLUTANT OR A HAZARDOUS SUBSTANCE UNDER SECTIONS 307 AND 311

OF THE CLEAN WATER ACT. CLEAN SPILLS BY SWEEPING, VACUUMING OR FLUSHING WITH WATER. NEUTRALIZING CHEMICALS: NONE REQUIRED.

SECTION VII - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: NO SPECIAL PRECAUTIONS.

VENTILATION: USE SUFFICIENT GENERAL AREA VENTILATION. LOCAL EXHAUST MAY BE NECESSARY WHERE TILY'S ARE EXCEEDED OR DUSTY CONDITIONS EXIST.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT:

EYE - NON-ESSENTIAL, BUT DESTRABLE.

GLOVES - NON-ESSENTIAL.

RESPIRATORY PROTECTION - FOR DUSTY CONDITIONS USE A DUST MASK APPROVED BY NIOSH.

OTHER - NONE.

PRECAUTIONARY STATEMENTS/LABELING:

HEALTH

FLAMMABILITY

0 O

REACTIVITY

PERSONAL PROTECTION

- CAUTION STATEMENTS: 1. ACCUMULATIONS ON WALKING SURFACES ARE VERY SLIPPERY WHEN WET.
 - 2. PROLONGED BREATHING OF EXCESSIVE DUST MAY AFFECT LUNG FUNCTION. USE DUST MASK IN DUSTY AREAS.

SECTION IX - PHYSICAL/CHEMICAL PROPERTIES

APPEARANCE: DRY POWDER

pH (28% SLURRY): 4.0 to 7.5

MELTING POINT: 1,700 °C

VAPOR DENSITY: NOT APPLICABLE

ODOR: NEGLIGIBLE

SPECIFIC GRAVITY: 2.61

BOILING POINT: NOT AVAILABLE

SOLUBILITY IN WATER: NEGLIGIBLE

SECTION X - STABILITY AND REACTIVITY

CONDITIONS CONTRIBUTING TO INSTABILITY: NONE

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION: NONE

HAZARDOUS DECOMPOSITION PRODUCTS: NONE

SECTION XI - TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE OVEREXPOSURE: NO ACUTE EFFECTS. BRIEF EXPOSURES ABOVE THE 8 HOUR THRESHOLD LIMIT VALUE SHOULD POSE NO ACUTE HEALTH RISKS.

EFFECTS OF CHRONIC OMEREXPOSURE: AS IS TRUE WITH ANY KAOLIN CLAY, LONG TERM OMEREXPOSURE TO HIGH CONCENTRATIONS OF THIS DUST WITHOUT THE USE OF A DUST MASK MAY PRODUCE X-RAY EVIDENCE OF DUST IN THE LUNGS. CONTINUED LONG TERM OVEREXPOSURE MAY AFFECT RESPIRATORY FUNCTION IN SOME INDIVIDUALS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: UNKNOWN.

SECTION XII - ECOLOGICAL INFORMATION

AQUATIC TOXICITY: (96 HOUR TLM) ALUMINUM SILICATE (2:1) - OVER 1,000 ppm (INSIGNIFICANT HAZARD). HYDRATED ALUMINUM SILICATE (KAOLIN) - NOT LISTED.

SOURCE: REGISTRY OF TOXIC EFFECTS OF CHEMICALS (JULY, 1980).

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE DIEFOSAL METHOD: NOT A HAZARDOUS WASTE UNDER RORA SECTION 3001. USE NORMAL SOLID WASTE DISPOSAL PROCEDURES WHICH ARE IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REQULATIONS.

SECTION XIV - TRANSPORT INFORMATION

DOT: NOT RESTRICTED.

INTERNATIONAL REGULATIONS: UN NUMBER NONE LAND TRANSPORT - NONE

INLAND WATERWAYS - NONE IMED CODE - NONE

IDAO/IATA - NONE HARMONIZED TARIFF CODE 2507.00.0000

SECTION XV - REGULATORY INFORMATION

STATE: CONSULT LOCAL AND STATE HAZARD COMUNICATION REGULATIONS.

FEDERAL: CPSC - NONE USDA - NONE

TSCA - LISTED EINECS - LISTED ROPA NO DSL - LISTED

SARA 304 - NO SARA 311 - YES (ACGID! TLV ASSIGNED.)

SARA 312 - POSSIBLY SARA 313 NO

OSHA - NOT LISTED BY NTP, OSHA OR JARC AS A CARCINOGEN.

FDA (TITLE 21 CODE OF FEDERAL REGULATIONS) - 175.105, 175.300, 175.320, 176.170, 176.180, 176.300, 177.1200,

177.2600, 178.3297, 186.1256.

OTHER: CALIFORNIA PROPOSITION 65 - YES NURTIK YES

WARNING! THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. TRACE AMOUNTS OF LEAD, CACMIUM HEXAVALENT CHROMIUM, ARSENIC, AND RESPIRABLE CRYSTALLINE SILICA.

SECTION XVI - OTHER INFORMATION

THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET IS BELIEVED TO BE RELIABLE. NO GLARANTEE IS IMPLIED OR EXPRESSED REGARDING THE ACCURACY OF THIS INFORMATION OR THE USE OF THE PRODUCT SINCE THE CONDITIONS FOR USE ARE BEYOND OUR CONTROL. NOTHING CONTAINED HEREIN SHOULD BE CONSTRUED AS A RECOMPONATION TO USE THIS PRODUCT IN CONFLICT WITH FEDERAL OR STATE REGULATIONS OR EXECUTED ANY MATERIAL OR ITS USE.

ISSUED: 6/2007 SUPERCEDIES: 4/2002