61728-1009

MATERIAL SAFETY DATA SHEET

Date Prepared: December 29, 2003

1. PRODUCT/COMPANY IDENTIFICATION

Product Name:
BONSAL® Sanded Polymer Modified Tile Grout (Colors & White)

Emergency Telephone:
800-424-9300 (Chemtrec) or
703-527-3887 (Outside USA)

Manufacturer's Name & Address:
Bonsal American/an Oldcastle company
8201 Arrowridge Blvd
Charlotte, NC 28273

Telephone Number for Information:
704-525-1621

2. EMERGENCY AND FIRST AID

EMERGENCY INFORMATION:	Bonsal® Sanded Polymer Modified Tile Grout is a light gray cementitious powder blend. When in contact with moisture in eyes or on skin, or when mixed with water, it becomes highly caustic (pH > 12) and will damage or burn (as severely as third-degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in Section 10.
EYES:	Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.
SKIN:	Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.
INHALATION:	Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of Polymer Modified Sanded Tile Grout require immediate medical attention.
INGESTION:	Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

3. COMPOSITION INFORMATION

DESCRIPTION: This product consists of finely ground hydraulic cement. major compounds are:

$3CaO \cdot SiO_2$	Tricalcium Silicate	CAS #12168-85-3
$2CaO \cdot SiO_2$	Dicalcium Silicate	CAS #10034-77-2
$3CaO \cdot Al_2O_3$	Tricalcium Aluminate	CAS #12042-78-3
$4CaO \cdot Al_2O_3 \cdot Fe_2O_3$	Tetracalcium aluminoferrite	CAS #12068-35-8
$CaSO_4 \cdot 2H_2O$	Calcium Sulfate dihydrate (Gypsum)	CAS #7778-18-9 (CAS #13397-24-5)
SiO_2	Silica Sand	CAS #14808-60-7

4. HAZARDOUS INGREDIENTS

COMPONENT	OSHA PEL (8-Hour TWA)	ACGIH TLV-TWA (1995-1996)	NIOSH REL (8-Hour TWA)
Hydraulic Cement	5 mg respirable dust/m^3 15 mg total dust/m^3	10 mg total dust/m^3	
Calcium sulfate (CAS #7778-18-9) [Gypsum (CAS #13397-24-5)]	5 mg respirable dust/m^3 15 mg total dust/m^3	10 mg total dust/m^3	
Iron oxide (CAS #1309-37-1)	10 mg/m^3	5 mg/m^3	
Carbon Black (CAS # 1333-86-4)	3.5 mg respirable dust/m^3	3.5 mg respirable dust/m^3	
Chrome (III) Oxide (CAS # 1308-38-9)	.5 mg respirable dust/m^3	.5 mg respirable dust/m^3	
Titanium Dioxide (CAS # 13463-67-7)	15 mg respirable dust/m^3	10 mg respirable dust/m^3	
Calcium carbonate (CAS #1317-65-3)	5 mg respirable dust/m^3 15 mg total dust/m^3	10 mg total dust/m^3	
Magnesium oxide (CAS #1309-48-4)	15 mg total dust/m^3	10 mg total dust/m^3	
Calcium oxide (CAS #1306-78-8)	5 mg/m^3	2 mg/m^3	
Crystalline silica (CAS #14808-60-7)	10 mg of respirable dust/m^3 % SiO_2 + 2 30 mg of total dust/m^3 % SiO_2 + 2 250 million particles/ft^3 % SiO_2 + 5	0.10 mg respirable quartz/m^3	0.05 mg respirable quartz dust/m^3

TRACE INGREDIENTS:

Due to the use of substances mined from the earth's crust, trace amounts of naturally occurring, potentially harmful constituents may be detected during chemical analysis.

5. HAZARD IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

NOTE: Potential health effects may vary depending upon the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described in Section 10.

EYE CONTACT:

(Acute/Chronic) Exposure to airborne dust may cause immediate or delayed irritation or inflammation of the cornea. Eye contact by larger amounts of dry powder or splashes of wet Polymer Modified Sanded Tile Grout may cause effects ranging from moderate eye irritation to chemical burns and blindness.

SKIN CONTACT:

(Acute) Exposure to dry Polymer Modified Sanded Tile Grout may cause drying of the skin with consequent mild irritation or more significant effects attributable to aggravation of other conditions. Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure.

(Chronic) Dry Polymer Modified Sanded Tile Grout coming in contact with wet skin or exposure to wet Polymer Modified Sanded Tile Grout may cause more severe skin effects, including thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of chemical (caustic) burns.

(Acute/Chronic) Some individuals may exhibit an allergic response upon exposure to Polymer Modified Sanded Tile Grout. The response may appear in a variety of forms ranging from a mild rash to severe skin ulcers.

INHALATION:

(Acute) Exposure to Polymer Modified Sanded Tile Grout may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system. Pre-existing upper respiratory and lung diseases may be aggravated by inhalation.

(Chronic) Inhalation exposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease, and/or cause or aggravate other lung diseases or conditions.

INGESTION:

(Acute/Chronic) Internal discomfort or ill effects are possible if large quantities are swallowed.

CARCINOGENIC POTENTIAL:

Polymer Modified Sanded Tile Grout is not recognized as a carcinogen by NTP, OSHA, or IARC. However, it may contain trace amounts of heavy metals recognized as carcinogens by these organizations. In addition, IARC classifies crystalline silica, a trace constituent, as a known human carcinogen (Group I). NTP has characterized respirable silica as "reasonably anticipated to be a carcinogen." (See also Section 13.)

6. PHYSICAL/CHEMICAL DATA

APPEARANCE/ODOR:	Gray, white or colored powder, odorless	**PHYSICAL STATE:**	Solid (Powder)
BOILING POINT:	> 1000ƒC	**MELTING POINT:**	Not applicable
VAPOR PRESSURE:	Not applicable	**VAPOR DENSITY:**	Not applicable
pH (IN WATER) (ASTM D 1293-95)	12 to 13	**SOLUBILITY IN WATER:**	Slightly soluble (0.1% to 1.0%)
SPECIFIC GRAVITY (H_2O = 1.0):	2.8	**EVAPORATION RATE:**	Not applicable

7. FIRE AND EXPLOSION

FLASH POINT:	None	**LOWER EXPLOSIVE LIMIT:**	None
AUTO IGNITION TEMPERATURE:	Not combustible	**UPPER EXPLOSIVE LIMIT:**	None
FLAMMABLE LIMITS	Not applicable	**SPECIAL FIRE FIGHTING PROCEDURES:**	None
EXTINGUISHING MEDIA:	Not combustible	**UNUSUAL FIRE AND EXPLOSION HAZARDS:**	None
HAZARDOUS COMBUSTION PRODUCTS:	None		

8. STABILITY AND REACTIVITY DATA

STABILITY:	Product is stable. Keep dry until used.
CONDITIONS TO AVOID:	Unintentional contact with water. Contact with water will result in hydration and produces (caustic) calcium hydroxide.
INCOMPATIBILITY:	Wet Polymer Modified Sanded Tile Grout is alkaline. As such, it is incompatible with acids, ammonium salts and aluminum metal.
HAZARDOUS DECOMPOSITION:	Will not occur.
HAZARDOUS POLYMERIZATION:	Will not occur.

9. PRECAUTIONS FOR HANDLING, STORAGE AND DISPOSAL

HANDLING AND STORAGE	Keep dry until used. Handle and store in a manner so that airborne dust does not exceed applicable exposure limits. Use adequate ventilation and dust collection. Use exposure control and personal protection methods as described in Section 10.

SPILL:	Use dry clean-up methods that do not disperse dust into the air or entry into surface water. Material can be used if not contaminated. Place in an appropriate container for disposal or use. Avoid inhalation of dust and contact with skin and eyes. Use exposure control and personal protection methods as described in Section 10.
DISPOSAL:	Comply with all applicable local, state and federal regulations for disposal of unusable or contaminated materials. Dispose of packaging/containers according to local, state and federal regulations.

10. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:	Use local exhaust or general dilution ventilation to control dust levels below applicable exposure limits. Minimize dispersal of dust into the air. If local or general ventilation is not adequate to control dust levels below applicable exposure limits or when dust causes irritation or discomfort, use MSHA/NIOSH approved respirators.
EYE PROTECTION:	Wear safety glasses with side shields or goggles to avoid contact with the eyes. In extremely dusty environments and unpredictable environments, wear tight-fitting unvented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when handling cement or cement containing products.
SKIN PROTECTION:	Wear impervious abrasion- and alkali-resistant gloves, boots, long-sleeved shirt, long pants or other protective clothing to prevent skin contact. Promptly remove clothing dusty with dry Polymer Modified Sanded Tile Grout or clothing dampened with moisture mixed with Polymer Modified Sanded Tile Grout, and launder before re-use. If contact occurs, wash areas contacted by material with pH neutral soap and water.

11. TRANSPORTATION DATA

Polymer Modified Sanded Tile Grout is not hazardous under U.S. DOT or TDG regulations.

12. OTHER REGULATORY INFORMATION

Status under US OSHA Hazard Communication Rule 29 CFR 1910.1200:	Polymer Modified Sanded Tile Grout is considered a hazardous chemical under this regulation and should be included in the employer's hazard communication program.
Status under CERCLA/Superfund, 40 CFR 117 and 302:	Not listed.
Hazard Category under SARA (Title III), Sections 311 and 312:	Polymer Modified Sanded Tile Grout qualifies as a hazardous substance with delayed health effects.

Status under SARA (Title III), Section 313:	Not subject to reporting requirements under Section 313.
Status under TSCA (as of May 1997):	Some substances in Polymer Modified Sanded Tile Grout are on the TSCA inventory list.
Status under the Federal Hazardous Substances Act:	Polymer Modified Sanded Tile Grout is a hazardous substance subject to statutes promulgated under the subject act.
Status under California Proposition 65:	This product contains crystalline silica, a substance known to the State of California to cause cancer. This product also may contain trace amounts of heavy metals known to the State of California to cause cancer, birth defects or other reproductive harm.
Status under Canadian Environmental Protection Act:	Not listed.
Status under Canadian WHMIS:	Polymer Modified Sanded Tile Grout is considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class D2A, E - Corrosive Material) and subject to the requirements of WHMIS.

13. OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. It is the user's obligation to determine the conditions of safe use of this product.

MS726 Glue
Glue for wood coaster kit.

Pidilite

MATERIAL SAFETY DATA SHEET

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SECTION I - IDENTIFICATION OF COMPANY/ BUSINESS

NAME : PIDILITE INDUSTRIES LIMITED
ADDRESS : Ram Krishna Mandir Road, Kondivita, Andheri (E), Mumbai 400 059.
Telephone : 91-022-2836 7085. Fax: 91-022-2837 6165. E-mail : rajerm@pidilite.com
USE : Vinyl acetate homopolymer emulsion as Wood bonding adhesive.

SECTION II – HAZARDOUS CONSTITUENTS OF MATERIAL

COMPONENT	CAS NUMBER	PERCENT	PERMISSIBLE EXPOSURE LIMIT [TWA]	SHORT TERM EXPOSURE LIMIT[STEL]
Vinyl acetate homopolymer	Proprietary	44 ± 1%	NH/NA	NH/NA
Volatiles (Mainly water vapours)	Mixture	56 ± 1%	NH/NA	NH/NA

SECTION III- IDENTIFICATION OF HAZARDS

TOXIC EFFECTS OF EXPOSURE/ CONTACT :
SKIN CONTACT : May irritate skin on prolonged or repeated contact.
EYE CONTACT : May cause slight irritation to eyes.
INHALATION : Vapours can cause irritation of mucous membrane, nausea, headache and dizziness.
INGESTION : Harmful.
DELAYED EFFECTS: Not reported.

SECTION IV- FIRST AID MEASURES

SKIN CONTACT : Flush skin with plenty of water while removing contaminated clothes. Wash contaminated clothes before reuse.
EYE CONTACT : Immediately flush eyes with plenty of water for at least 15 minutes. Consult Physician if irritation persist.
INHALATION : Move the subject to fresh air. If not breathing, give artificial respiration. If respiration is difficult, give Oxygen and seek help from Physician.
INGESTION : Immediately give two glasses of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a Physician.
NOTE TO PHYSICIAN: There is no specific antidote. Treatment should be given symptomatically on the clinical conditions.

SECTION V - FIRE AND EXPLOSION HAZARD OF MATERIAL

FIRE EXTINGUISHING MEDIA : Material will not burn, however dried film may burn. Use Water, Foam, Dry Chemical Powder, CO_2 to extinguish the fire.
THERMAL DECOMPOSITION PRODUCT : May yield acrid smoke and irritating gases with oxides of carbon and organic fragments.
SPECIAL FIRE FIGHTING PROCEDURE : Suggested to wear self contained breathing apparatus or equivalent (MSHA/ NIOSH - approved).
UNUSUAL FIRE AND EXPOLSION HAZARDS : Emulsion will not burn. They may spatter if the temperature exceeds boiling point. Dried polymer films are capable of burning.

INITIALS :

MSDS CODE : 013SD88805 REV. : 0.1 DATE : 25.04.2005

For MRIDUL ENTERPRISES

Auth. Signatory

SECTION VI - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Use personal protective equipment & handling listed under sections VII & VIII

ENVIRONMENT PRECAUTIONS : Review fire and safety precautions before proceeding with clean up. Use appropriate personal protective equipment during clean up. Keep spectators away. Dike and contain spill with an inert [e.g. sand, earth, etc.] absorbent. Collect the absorbed material in plastic bag for final disposal. Transfer liquid to container for recovery or disposal. Emulsion can be coagulated by stepwise addition of lime and Ferric Chloride or Ferric Sulphate up to a water clear end point. Keep spill out of sewers and open bodies of water.

CLEANING METHODS : Wash floor with water. Contaminated diking material may be incinerated or land filled according to current local or central regulation.

SECTION VII- HANDLING AND STORAGE

HANDLING PROCEDURE: Use appropriate personal protective equipment [PPE] during handling. Protect against physical damage. Observe good hygiene practices.

STORAGE REQUIREMENTS : Store at ambient temperatures. Keep away from freezing if temperature is too low. Keep container tightly closed when not in use. Maintain good housekeeping.

SECTION VIII- EXPOSURE CONTROL/ PERSONAL PROTECTIVE EQUIPMENT

PERSONAL PROTECTIVE EQUIPMENT :

HYGIENE MEASURES	: Do not eat, drink or smoke when working. Wash hands before breaks and after work.
EYE PROTECTION	: Use chemical splash proof safety goggles or equivalent.
HAND PROTECTION	: Impervious (rubber, neoprene, pvc, etc.) hand gloves, aprons.
RESPIRATION PROTECTION	: None required if good ventilation in the area is maintained. Otherwise suggested to wear MSHA/NIOSH approved respirator where vapour concentrations is more.
OTHERS	: Eye wash facility and emergency shower.
ENGINEERING CONTROLS	: Not specific.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE : Milky white emulsion.
ODOUR : Mild odour of free monomer.
BOILING POINT (°C) : About 100 °C **pH :** 4.0 – 6.0
VISCOSITY (POISE) @ 30 °C: 200 - 300
DENSITY/ SPECIFIC GRAVITY (WATER=1) : 1.05 – 1.1
SOLUBILITY IN WATER : Miscible
VAPOUR PRESSURE AT 25 °C : NA
FLAMMABILITY : Not-flammable.
EXPLOSIVE LIMITS (% by vol.) : LEL : NA **UEL :** NA
FLASH POINT : NA

SECTION X - STABILITY AND REACTIVITY DATA

CHEMICAL STABILITY	: Stable under normal ambient conditions.
INCOMPATIBILITY	: Mineral acids and strong salt solution.
HAZARDOUS POLYMERISION	: Will not occur.
CONDITIONS TO AVIOD	: Not specific.

SECTION XI - TOXICOLOGICAL INFORMATION

Free monomer content in the product is not a problem in normal handling and storage. However, monomer vapours may be released into workroom atmosphere when emulsion is heat cured or dried. No data available on toxicity effects on oral, dermal or inhalation exposure.

For MRIDUL ENTERPRISES

Auth. Signatory

SECTION XII - ECOLOGICAL INFORMATION

No data available on ecotoxicity or environmental fate, however as a general practice, do not allow to enter soil, waterways and open bodies of water.

SECTION XIII - DISPOSAL INFORMATION

The contaminated/discarded material may be disposed off in accordance with current local, Federal, State or Central regulations.

SECTION XIV - TRANSPORTATION INFORMATION

DOT/ IMO/ ICAO/ IATA INFORMATION : Not Regulated

TDG INFORMATION : Not determined

The material is not considered as dangerous for transportation

SECTION XV - REGULATORY INFORMATION

TSCA : All components are on the TSCA Inventory.
SARA/ TITLE III : No substance at or above the reporting threshold under section 313.& 312.
OSHA Hazard Communication Std. 29CFR1910.1200 : Not a health hazard or physical hazard.

SECTION XVI - MISCELLANEOUS INFORMATION

DISCLAIMER : The data presented here is based on information we believe to be reliable but unknown risks may be present. We disclaim liability for damage or injury which results from the use of the above data and nothing contained therein shall constitute a guarantee or a warranty (including warranty of Merchantibility or fitness for a particular purpose) or representation (including freedom from Patentability) by us with respect to the accuracy or completeness of the data, the product described or their use for any specific purpose as known to us. The final determination of the suitability of information, the manner of use of information or product and potential infringement of patents is the sole responsibility of the user.

ABBREVIATIONS USED : NA - NOT APPLICABLE, NH - NON HAZARDOUS, CI - CONTENT INSIGNIFICANT.

ISSUED BY SAFETY DEPARTMENT **R M RAJE** **TEL. NO. 2836 7085 EXT. 7277**

INITIALS : PAGE : 3/3

MSDS CODE : 013SD88805 **REV. : 0.1** **DATE : 25.04.2005**

For MRIDUL ENTERPRISES

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