



TEICHERT AGGREGATES

P.O. BOX 15002
SACRAMENTO, CALIFORNIA 95851

MATERIAL SAFETY DATA SHEET

EFFECTIVE DATE: FEBRUARY 2004

I. IDENTIFICATION

| | | | |
|---------------------------------|-----------------------------------------------------|---------------|-------------|
| TRADE NAME | ASPHALTIC CONCRETE | | |
| COMMON NAME: | HMA, BLACKTOP, HOTMIX | | |
| MANUFACTURER'S NAME | TEICHERT AGGREGATES | | |
| ADDRESS: | P.O. BOX 15002, SACRAMENTO, CA 95851 | | |
| TELEPHONE NUMBER: | (916) 484-3011 | DATE REVISED: | AUGUST 2003 |
| PRODUCT DESCRIPTION: | CRUSHED ROCK AND SAND MIXED WITH PETROLEUM ASPHALT. | | |
| DEPARTMENT OF TRANSPORTATION | HAZARD CLASSIFICATION | N/A | |
| | SHIPPING NAME | N/A | |

II. PHYSICAL PROPERTIES

| | | | |
|------------------------------|-----------|----------------------------------------------------------------|-----------|
| VAPOR DENSITY (AIR=1) | > 1 | MELTING POINT OR RANGE, °F | 100-135°F |
| SPECIFIC GRAVITY | 2.3 – 2.9 | BOILING POINT OR RANGE, °F | 470° |
| SOLUBILITY IN WATER | nil | EVAPORATION RATE (BUTYLACETATE=1) | NE |
| VAPOR PRESSURE, mmHg at 20°C | N/E | APPEARANCE AND ODOR: coarse black material with petroleum odor | |

III. HAZARDOUS INGREDIENTS

| CHEMICAL NAME | CAS NUMBER | % (Approx) | EXPOSURE LIMITS IN AIR | |
|---------------------------|------------|------------|------------------------------------------------|------------------------------------------------|
| | | | ACGIH TLV | OSHA PEL |
| CRUSHED ROCK AND SAND (1) | MIXTURE | > 90 | 10 mg/m ^{3*} 3 mg/m ^{3**} | 10 mg/m ^{3*} 5 mg/m ^{3**} |
| PETROLEUM ASPHALT | 64741-56-6 | <10 | 0.5 mg/m ^{3***} | 5 mg/m ^{3*} |
| SYNTHETIC RUBBER (2) | 9003-55-8 | <1 | N/E | N/E |

*TOTAL DUST **RESPIRABLE DUST ***FUMES-ASPHALT (BITUMEN) FUME, AS BENZENE-SOLUBLE AEROSOL.

NOTES:

- (1) Natural sand includes quartz, a form of crystalline silica. Composition varies naturally.
- (2) The product may include one or more performance-enhancing additives. Each is present at less than 1% of the total product.

EMERGENCY PHONE NUMBER

N/A = not applicable

(800) 287-7383

N/E = not established

IV. FIRE AND EXPLOSION HAZARD DATA

| | |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLASH POINT, °F | >500°F |
| FLAMMABLE LIMITS IN AIR, % by volume | LOWER (LEL) N/E UPPER (UEL) N/E |
| AUTO IGNITION TEMPERATURE, °F | N/E |
| FIRE EXTINGUISHING MATERIALS | DRY CHEMICAL, FOAM, CO ₂ . AGENTS APPROVED FOR CLASS B HAZARDS. AVOID USE OF STRAIGHT-STREAM WATER. USE WATER TO KEEP FIRE-EXPOSED CONTAINERS COOL. DO NOT LET WATER MAKE DIRECT CONTACT WITH HOT MATERIAL IN A CONTAINER DUE TO THE POTENTIAL OF A VIOLENT EXPLOSION. |
| SPECIAL FIRE FIGHTING PROCEDURES | USE WATER ON ASPHALT FIRE IN A TANK OR OTHER CONTAINER MAY CAUSE A VIOLENT ERUPTION. |
| UNUSUAL FIRE AND EXPLOSION HAZARDS | ADDING WATER TO HOT ASPHALT PRESENTS AN EXPLOSION HAZARD. DO NOT HEAT ABOVE FLASHPOINT. NEVER WELD OR USE CUTTING TORCH, OR OPEN FLAME, ON OR NEAR FULL OR PARTIALLY FULL OR EMPTY CONTAINERS, AS VAPORS CAN IGNITE EXPLOSIVELY. <u>WARNING</u> : HYDROGEN SULFIDE (H ₂ S) AND OTHER GASES/VAPORS MAY EVOLVE AND COLLECT IN THE HEADSPACE OF STORAGE TANKS, OR OTHER ENCLOSED VESSELS AND CREATE AN EXPLOSION, TOXIC OR OXYGEN DEFICIENT ENVIRONMENT. |

V. HEALTH HAZARD INFORMATION

SYMPTOMS OF OVEREXPOSURE

| | |
|---------------------------|-------------------------------------------------------------------------------------------|
| INHALED | VAPORS/FUMES FROM HOT MATERIALS MAY CAUSE THROAT OR LUNG IRRITATION AND NAUSEA. |
| CONTACT WITH SKIN OR EYES | HOT, MOLTEN MATERIAL CAN CAUSE THERMAL BURNS. EMISSIONS (FUMES) MAY BE IRRITATING. |
| ABSORBED THROUGH SKIN | NO |
| SWALLOWED | NOT EXPECTED TO POSE A SIGNIFICANT HEALTH HAZARD. DIRECT CONTACT CAN CAUSE THERMAL BURNS. |

HEALTH EFFECTS OR RISKS FROM EXPOSURE (ALSO SEE SECTION IX)

| | |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ACUTE | EYE AND RESPIRATORY TRACT IRRITATION, THERMAL CONTACT BURNS. |
| CHRONIC | PHOTOSENSITIZATION OF THE SKIN, SKIN DRYNESS/IRRITATION, CHRONIC RESPIRATORY CONDITIONS (e.g., BRONCHITIS). MECHANICAL FORCES WHICH GENERATE DUST PARTICLES MAY CAUSE EXPOSURE TO RESPIRABLE SILICA (QUARTZ) DUST, WHICH COULD LEAD TO SILICOSIS. |
| MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE | PRIOR SKIN PROBLEMS SUCH AS DERMATITIS, PRIOR RESPIRATORY TRACT CONDITIONS SUCH AS BRONCHITIS. |

EMERGENCY AND FIRST AID PROCEDURES

| | |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EYE CONTACT | FLUSH EYES WITH LARGE AMOUNTS OF CLEAN WATER FOR AT LEAST 15 MINUTES WITH EYELIDS OPEN. SEEK MEDICAL ATTENTION. |
| SKIN CONTACT | IF HOT, MOLTEN MATERIAL CONTACTS SKIN, QUICKLY COOL THE AREA WITH WATER. SEEK MEDICAL ATTENTION FOR EXTENSIVE BURNS. DO NOT USE SOLVENTS OR THINNER TO REMOVE ASPHALT FROM SKIN. ASPHALT CAN BE REMOVED WITH VEGETABLE OIL FOLLOWED BY SOAP AND WATER OR WATERLESS HAND CLEANER. |

| | | |
|-------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS: | | CARBON MONOXIDE AND OTHER COMPOUNDS (SUCH AS AMINES, NITROGEN DIOXIDE, SULFUR DIOXIDE, OZONE, HYDROGEN SULFIDE AND VARIOUS HYDROCARBONS) MAY BE RELEASED BY THERMAL DECOMPOSITION. HAZARDOUS VAPORS MAY COLLECT IN ENCLOSED VESSELS OR AREAS IF NOT PROPERLY VENTILATED. |
| HAZARDOUS POLYMERIZATION | | |
| MAY OCCUR | WILL NOT OCCUR | CONDITIONS TO AVOID: NONE |
| | X | |

VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

| | |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SPILL RESPONSE PROCEDURES | MATERIAL DOES NOT NORMALLY POSE HAZARD TO WORKERS OR THE ENVIRONMENT. IF MATERIAL IS HOT, ALLOW TO COOL. CLEANUP MATERIAL AS SOON AS POSSIBLE. TRANSFER SPILLED MATERIAL TO CONTAINERS FOR REUSE OR DISPOSAL WITH NORMAL TRASH. USE NORMAL GOOD HYGIENE PRACTICES TO MINIMIZE EXPOSURE. PREVENT SPILLED MATERIALS FROM ENTERING STREAMS, DRAINAGES, OR SEWERS. SPILLS ENTERING SURFACE WATERS (OR OTHER WATERWAYS) THAT CAUSE A SHEEN MUST BE REPORTED TO APPROPRIATE COUNTY, STATE AND FEDERAL OFFICIALS. |
| WASTE DISPOSAL METHOD | PRODUCT IS NOT CLASSIFIED AS HAZARDOUS WASTE. |

VIII. PERSONAL PROTECTION INFORMATION

| | |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RESPIRATORY PROTECTION | IF AIRBORNE CONCENTRATIONS EXCEED CAL/OSHA PERMISSIBLE EXPOSURE LIMITS (PEL), WEAR NIOSH-APPROVED RESPIRATORS TO MAINTAIN EXPOSURES BELOW THE PEL. |
| VENTILATION AND ENGINEERING CONTROLS | USE ONLY IN WELL VENTILATED AREAS. |
| PROTECTIVE GLOVES | AVOID PROLONGED OR REPEATED CONTACT WITH PRODUCT. WEAR HEAT RESISTANT AND/OR IMPERMEABLE GLOVES, ACCORDING TO THE PHYSICAL STATE OF THE PRODUCT. COTTON OR LEATHER WORK GLOVES ARE <u>NOT</u> RECOMMENDED. |
| EYE PROTECTION | AVOID CONTACT WITH EYES; WEAR SAFETY GLASSES WITH SIDE SHIELDS OR GOGGLES. |
| OTHER CLOTHING AND EQUIPMENT | COVERALLS OR OTHER WORK CLOTHING THAT MINIMIZES SKIN CONTACT WITH PRODUCT. |
| WORK PRACTICES, HYGIENIC PRACTICES | USE WORK PRACTICES THAT MINIMIZES THE CHANCE OF SKIN, EYE AND CLOTHING CONTACT. USE NORMAL GOOD HYGIENE PRACTICES. |

IX. STORAGE & HANDLING PRECAUTIONS

Follow personal protection and controls as set forth in Section VIII of this MSDS when handling product.

Store away from all ignition sources and open flames in accordance with applicable laws and regulations. Storage containers should be vented to prevent over pressurization and vacuum. If personnel must enter a tank that contained this material, follow OSHA's Confined Space Entry Program as specified in 29 CFR 1910.146. Do not store near food, beverages or smoking materials.

Vapors containing hydrogen sulfide may accumulate during storage or transport of asphaltic materials. When petroleum asphalt products are heated, potentially irritating emissions (fumes, mists, and vapors) may be released. Respirable crystalline silica-containing dust may be generated when hardened concrete is subject to mechanical forces such as demolition work, surface treatment (sanding, grooving, chiseling, etc.), and recycling of pavement.

Do not attempt to clean empty containers. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition, they may explode and cause injury or death.

Tripping incidences have occurred because of asphalt buildup on bottoms of shoes and boots; buildup should be removed regularly to prevent such incidences. Do not use solvents or thinners to clean footwear.

Teichert Aggregates believes the information contained herein is accurate; however, Teichert Aggregates makes no guarantees with respect to such accuracy and assumes no liability in connection with the use of the information contained herein by any party. The provision of the information contained herein is not intended to be and should not be constructed as legal advice or as ensuring compliance with any federal, state or local laws and regulations. Any party using this product should review all such laws, rules or regulations prior to use.

No warranty, expressed or implied is made of product fitness for a particular purpose or otherwise.

REPLACES 2/96 MSDS
Revised 2/04