



weldon materials, inc.

Hot Mix Asphalt • Crushed Stone • Ready-Mixed Concrete

Material Safety Data Sheet (MSDS)

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Latex Crack Filler

DESCRIPTION: Brown/Black, Liquid with Asphalt Odor

MANUFACTURER:

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2 - COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	PERCENTAGE BY WEIGHT	OSHA PEL	ACGIH TLV
Asphalt	8052-42-4	50-70	NA	0.5 mg/m ³ Cyclohexane Extractable Particulate
Water	7732-18-5	30-40	NA	NA
Clay	1332-58-7	3-10	5 mg/m ³ (PNOR) (Resp.) 15 mg/m ³ (PNOR) (Total)	5 mg/m ³ (PNOR) (Resp.) 10 mg/m ³ (PNOR) (Total)

NOTE:

- 1) The percentage range reflects typical values for this series of products. Formulations are based upon materials derived from natural sources and manufacturing residues, and may contain quantities of elements and compounds that are not listed as major constituents.
- 2) All exposure limits are 8-hour TWAs unless otherwise specified.
- 3) Abbreviations/Acronyms are defined in Section 16 – Other Information.
- 4) OSHA PEL – Regulatory exposure standard.
- 5) ACGIH TLV – Consensus exposure guideline, not a mandatory regulatory requirement.

Associated hazards are heavily weighted toward asphalt. Although this product is not designated for high temperature usage, the hazards associated with potential elevated temperature are addressed within this MSDS.

Asphalt component may contain trace quantities of benzene (<0.1%). High temperature conditions may emit hydrogen sulfide, an asphalt decomposition product.

Asphalt products can contain hydrogen sulfide, because it is naturally occurring in crude oil from which asphalt is derived. Hydrogen sulfide can also be present as a by-product of asphalt processing.

3 - HAZARDS IDENTIFICATION

GENERAL HAZARD STATEMENT: Potentially hazardous concentrations of airborne contaminants (vapor/mist) may be generated under certain handling conditions. Process should be performed in well-ventilated areas. High airborne contaminant concentrations should be addressed by a Certified Industrial Hygienist or other competent professional. If airborne contaminants cannot be effectively limited by procedural improvements or ventilation and other engineering controls, respiratory protection and other PPE must be utilized.

EMERGENCY OVERVIEW:

Health Hazards: May be irritating to the skin, eyes, and respiratory tract and may be harmful if swallowed or absorbed through the skin. Fumes from heated material may be irritating and hazardous and may cause allergic skin reaction. Overexposure may cause CNS depression. Aspiration hazard if swallowed. Can enter lungs and cause damage. Heated material may cause thermal burns. Potential reproductive hazard. Contains material which can cause cancer. SEE TOXICOLOGICAL INFORMATION (Section 11) for more information.

Flammability Hazards: Asphalt component is combustible per OSHA Guidelines, 29 CFR 1910.1200(c)

Reactivity Hazards: Stable

HMIS DESIGNATION: HEALTH 1 FLAMMABILITY 2 REACTIVITY 0

PRIMARY ROUTE OF ENTRY: Inhalation of airborne organic vapor.

SKIN : Contact may cause reddening, itching and inflammation. Defatting agent.

Contains a component(s) that may cause allergic skin reactions in some individuals. May cause photosensitization in some individuals.

Absorption from prolonged or repeated skin contact may cause systemic toxicity.

Contact with heated material may cause thermal burns.

EYE: Irritating. Exposure to vapors, fumes or mists may cause irritation. Direct contact may cause irritation, redness, tearing and blurred vision. Prolonged or repeated exposure may cause irritation and conjunctivitis.

INHALATION: Airborne mists, vapors or fumes may irritate the respiratory tract and mucous membranes. Symptoms may include sore throat, coughing, breathing difficulty, sneezing and burning sensation, depending on the concentration and duration of exposure. Avoid breathing fumes or vapors from heated material.

May cause central nervous system depression or effects. Symptoms may include headache, excitation, euphoria, dizziness, incoordination, drowsiness, light-headedness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, depending on the concentration and duration of exposure.

Components have been shown to be weak cardiac sensitizers which can result in cardiac arrhythmia and ventricular fibrillation.

May release hydrogen sulfide gas which is highly toxic. Hydrogen sulfide can cause respiratory paralysis and death depending on the concentration and duration of exposure. Do not rely on ability to smell vapors, since odor fatigue rapidly occurs. Effects of overexposure include irritation of the nose and throat, nausea, vomiting, diarrhea, abdominal pain and signs of nervous system depression (e.g. headache, drowsiness, dizziness, loss of coordination and fatigue), irregular heartbeats, pulmonary edema, weakness and convulsions.

See Storage and Handling (Section 7) for more information.

Contains a component(s) which may cause allergic or asthma-like reactions in certain individuals.

Overexposure to this material may cause systemic damage including target organ effects listed under "TOXICOLOGICAL INFORMATION" (Section 11).

Other specific symptoms of exposure are listed under "TOXICOLOGICAL INFORMATION" (Section 11).

INGESTION: May cause irritation of the mouth, throat and gastrointestinal tract. Symptoms may include salivation, pain, nausea, vomiting, and diarrhea. Aspiration into lungs may cause chemical pneumonia and lung damage.

Exposure may also cause central nervous system symptoms similar to those listed under "INHALATION" (see inhalation section).

Overexposure to this material may cause systemic damage including target organ effects listed under "TOXICOLOGICAL INFORMATION" (Section 11).

Other specific symptoms of exposure are listed under "TOXICOLOGICAL INFORMATION" (Section 11).

4 – FIRST AID MEASURES

SKIN: For hot material, immerse or flush skin with large amounts of the coldest water possible. Cover with clean cotton sheeting or gauze. Remove clothing if not sticking to skin. DO NOT try to remove solidified materials from the skin as the damaged flesh can be easily torn. DO NOT try to dissolve with solvents or thinners. GET IMMEDIATE MEDICAL ATTENTION!

For cold material, immediately wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation persists.

EYE: Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. GET IMMEDIATE MEDICAL ATTENTION!

Burns due to contact with heated material require immediate medical attention.

INHALATION: Safely remove the victim from exposure. DO NOT ATTEMPT TO RESCUE WITHOUT ADEQUATE PROTECTIVE GEAR AND PROPER TRAINING. Remove to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure airway is clear and give oxygen.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION!

INGESTION: Gastric lavage, if required, should be performed by qualified medical personnel. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Do not induce vomiting because of danger of aspirating liquid into lungs, causing serious damage and chemical pneumonitis.

Keep affected person warm and at rest. GET IMMEDIATE MEDICAL ATTENTION!

NOTES TO PHYSICIAN

Gastric lavage may be indicated if ingested.

In cases of acute poisoning, artificial respiration with administration of oxygen may be useful for support. DO NOT GIVE EPINEPHRINE, EPHEDRINE OR SIMILAR ADRENERGIC DRUGS. THEY MAY INDUCE FATAL VENTRICULAR FIBRILLATION. Electrocardiographic monitoring should be carried out with severely ill patients to anticipate possible cardiac arrest.

Anemia may require the usual supportive measures. Medical evaluation of acute overexposure should include hematological determinations until stable.

If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

5 – FIRE FIGHTING MEASURES

HAZARDOUS COMBUSTION PRODUCTS: Combustion may produce carbon monoxide (CO), carbon dioxide (CO₂), oxides of nitrogen and sulfur (NO_x and SO_x), reactive hydrocarbons, hydrogen sulfide and irritating vapors.

EXTINGUISHING MEDIA: Use dry chemical, foam, or carbon dioxide to extinguish fire.

BASIC FIRE FIGHTING PROCEDURES: Material will burn in a fire. Evacuate area and fight fire from a safe distance.

Fire hazard (fuel content) is diluted by non-flammable clay and water.

Exercise extreme care when using water spray. When water is mixed with hot material, steam may rapidly develop resulting in violent foaming.

Firefighters must wear MSHA/NIOSH approved positive pressure-breathing apparatus (SCBA) with full-face mask and full-protective equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors may form explosive mixture with air. Vapors can travel to a source of ignition and flash back.

Explosion hazard if exposed to extreme heat.

Fire hazard (fuel content) is significantly diluted by non-combustible clay and water.

6 – ACCIDENTAL RELEASE MEASURES

EMERGENCY ACTION: eliminate and/or shut off ignition sources and keep ignition sources out of the area. Keep unnecessary people away, isolate hazard area and deny entry. Stay upwind. If fire is involved, evacuate endangered area as required (See EXPOSURE CONTROL/PERSONAL PROTECTION – Section 8).

ENVIRONMENTAL PRECAUTIONS: Eliminate all sources of ignition. Isolate hazard area and deny entry.

Product released into waterways may be hazardous to fish and other aquatic life.

Caution should be exercised regarding personnel safety and exposure to the released product. Notify local authorities and the National Response Center, if required.

Recycle of waste product is recommended.

SPILL OR LEAK PROCEDURE: Keep ignition sources out of area and shut off all ignition sources. Scrape up spilled material for disposal or recycle. Consult with local, state, and regional authorities for approved clean-up procedures.

See EXPOSURE CONTROL/PERSONAL PROTECTION – Section 8.

7 – HANDLING AND STORAGE

HANDLING: Use non-sparking tools. Do not cut, grind, drill weld or reuse containers unless adequate precautions are taken against these hazards.

STORAGE: Store in closed containers in a cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibles. Avoid contact with strong oxidizers.

Empty containers may contain product residue. Do not reuse without adequate precautions.

Hydrogen sulfide can build up in the head space of storage vessels containing this product. Use appropriate respiratory protection to prevent exposure. See EXPOSURE CONTROL/PERSONAL PROTECTION – Section 8.

When entering a storage vessel that has previously contained this product, it is recommended that the atmosphere be monitored for the presence of hydrogen sulfide and combustible vapors. See Composition information (Section 2) for exposure limits.

8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Ventilation and other forms of engineering controls are the preferred means for controlling exposures.

Consult NIOSH (National Institute for Occupational Safety and Health) for more information on guidelines for engineering controls.

EYE PROTECTION - PERSONAL PROTECTION EQUIPMENT (PPE): If splatter hazards exists, wear chemical safety goggles and face shield. Have eye-washing facilities readily available where eye contact can occur.

SKIN PROTECTION - PERSONAL PROTECTION EQUIPMENT (PPE): Use appropriate chemical protective gloves when handling at room temperature. Use gloves that protect against thermal burns when handling at high temperatures. Wear long-sleeved cotton shirt buttoned at the collar and full-length cotton pants.

Practice good personal hygiene.

RESPIRATORY PROTECTION – PERSONAL PROTECTION EQUIPMENT (PPE): A NIOSH/MSHA approved air purifying respirator with an appropriate cartridge, canister, and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. The use of air purifying respirators is not recommended where hydrogen sulfide levels may exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, when exposure levels are unknown, or any other circumstances where air-purifying respirators may not provide adequate protection.

Airborne dust respiratory protection is required if clay particles become airborne.

9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Range: >210° F (.99° C).

Percent Volatile: NA

Vapor Pressure: NA

Vapor Density : NA.

Bulk Density: >1 (Water = 1).

Appearance and Odor: Brown/Black Liquid;
Asphalt Odor.

Specific Gravity (Water = 1): >1

Molecular Formula: NA (Complex Mixture)

Molecular Weight: NA (Complex Mixture)

Solubility in water: (Water Emulsion)

Chemical Family: (Asphalt Emulsion)

Organic Compounds: 50-70%

10 – STABILITY AND REACTIVITY

STABILITY/INCOMPATIBILITY: Stable at ambient temperature (above 32° F). Incompatible with oxidizing agents. See precautions under HANDLING AND STORAGE (Section 7).

HAZARDOUS REACTIONS/DECOMPOSITION PRODUCTS: Combustion may produce carbon monoxide (CO), carbon dioxide (CO₂), oxides of nitrogen and sulfur (NO_x and SO_x), reactive hydrocarbons, hydrogen sulfide and irritating vapors.

11 – TOXICOLOGICAL INFORMATION

ROUTES OF EXPOSURE: Inhalation, ingestion skin and eye contact.

TOXICOLOGICAL DATA: Acute or chronic overexposure to this material or its components may cause systemic toxicity, including adverse effects to the follow: liver, kidney, lung, skin, spleen, thymus, blood elements, lymph nodes, testes, bone marrow, and nervous system.

Exposure to components of this material may cause the following specific symptoms, depending on the concentration and duration of exposure: anemia, pallor, fatigue, loss of appetite, anxiety, and melanosis.

Irritating and toxic hydrogen sulfide gas may be found in confined vapor space. **WARNING:** "rotten egg" odor of hydrogen sulfide is not a reliable indicator for warning and exposure since odor fatigue readily occurs. Odor sensation is lost immediately at concentrations greater than 150 ppm. Avoid exposures to hydrogen sulfide gas. Hydrogen sulfide causes rapid death due to metabolic asphyxiation. Case reports suggest that toxic amounts can enter the body through a punctured eardrum, even while wearing some types of respiratory protective equipment.

CARCINOGENICITY: IARC has determined that there is limited evidence that organic constituents of this product are carcinogenic to animals and humans. OSHA has determined that asphalt is not classifiable as a human carcinogen due to inadequate data.

This material may contain trace of quantities of benzene. Benzene is carcinogenic to laboratory animals when given by intubation or by inhalation. There is an association between occupational exposure to benzene and human leukemia carcinogenic determinations: IARC Human positive and Animal suspected carcinogen; NTP Known carcinogen; ACGIH Suspected carcinogen; and OSHA carcinogen.

Some of the components of this product (clay) are finely divided solids. However, because of the physical nature of this product, dust generation is not expected so the health effects associated with the dusts are unlikely to occur.

TERATOGENICITY, MUTAGENICITY, OTHER REPRODUCTIVE EFFECTS: this product may contain components which may cause adverse reproductive and/or development effects.

SENSITIZATION TO MATERIAL: The possibility of allergic sensitization should be considered.

PRE-EXISTING CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing medical conditions which may be aggravated by exposure include disorders of the skin, liver, kidney, blood respiratory, and nervous system.

12 – ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: This material may be toxic to fish and other aquatic life and may impede growth of vegetation.

13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: This product, as supplied, when discarded or disposed of, may be a hazardous waste according to Federal regulations (40 CFR 261) due to its ignitability and benzene content. Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine, at the time of disposal, whether the material is a hazardous waste subject to RCRA.

The transportation, storage, treatment, and disposal of RCRA waste material must be conducted in compliance with 40 CFR 232, 263, 268, and 270. Disposal can occur only in properly permitted facilities. Check state and local regulations for an additional requirements as these may be more restrictive than federal laws and regulations. Chemical additions, processing or otherwise altering the material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Disposal of this material must be conducted in compliance with all federal, state and local regulations. Recycle of waste material is recommended.

14 – TRANSPORT INFORMATION

Transport in accordance with local regulations, where applicable. Consult 49 CFR 172.101 for shipping information.

15 – REGULATORY INFORMATION

FEDERAL REGULATIONS: Major toxic components of this product are listed on the TSCA inventory.

Airborne solvents may accumulate in non-ventilated storage spaces. Consult OSHA's Benzene standard 29 CFR 1910.1028 for provisions on air monitoring, employee training, medical monitoring, etc.

Releases may be reportable to the National Response Center (1-800-424-8802) under the Clean Water Act, 33 U.S.C. 1321(b)(3) and (5). Check state and local regulations for any additional requirements as these may be more restrictive than federal laws and regulations. Failure to report may result in substantial civil and criminal penalties.

This product contains one or more components designated as hazardous substances or toxic pollutants pursuant to the Federal Clean Water Act (40 CFR 116.4 Table A; 40 CFR 401.15). Any unpermitted introduction of this product into a facility stormwater or wastewater discharge may constitute a violation of the Clean Water Act. Facilities must notify the appropriate permitting agency prior to introducing this product into the aforementioned discharge.

This product contains one or more substances listed as hazardous, toxic, or flammable air pollutants under Section 112 of the Clean Air Act.

There may be specific regulations at the local, regional or state/provincial level that pertain to this product.

STATE REGULATIONS: Warning: This product may contain a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

SARA TITLE III RATINGS: Delayed Hazard; Fire Hazard.

The following ingredients of this product are listed in SARA 313:

SARA LISTED INGREDIENT NAME	CAS NUMBER	MAXIMUM %
Hydrogen Sulfide	7783-06-4	<0.1
Benzene	71-43-2	<0.1

16 – OTHER INFORMATION

ABBREVIATIONS/ACRONYMS:

ACGIH	- American Conference of Governmental Industrial Hygienists	NIOSH	- National Institute for Occupational Safety and Health
AL	- Action Level	NTP	- National Toxicology Program
C	- Ceiling Concentration	OSHA	- Occupational Safety and Health Administration
CAS	- Chemical Abstracts Service	PEL	- Permissible Exposure Limit
CFR	- Code of Federal Regulations	PNOR	- Particulate Not Otherwise Regulated
CPR	- Cardiopulmonary Resuscitation	PNOC	- Particulate Not Otherwise Classified
EST	- Eastern Standard Time	POTW	- Publicly Owned Treatment Works
HMIS	- Hazardous Materials Identification System	PPE	- Personal Protective Equipment
IARC	- International Agency for Research on Cancer	ppm	- parts per million
mg/m ³	- milligrams per cubic meter of air	resp	- respirable
mppcf	- million particles per cubic foot	SCBA	- Self-contained Breathing Apparatus
MSDS	- Material Safety Data Sheet	STEL	- Short-term Exposure Limit
MSHA	- Mine Safety and Health Administration	TLV	- Threshold Limit Value
N/A	- Not Applicable; Not Available	TWA	- Time-weighted Average
NFPA	- National Fire Protection Association	µg/m ³	- Micrograms per cubic meter of air
NIA	- No Information Available	<	- Less than
NIF	- No Information Found	>	- Greater than

DISCLAIMER: Details presented in this MSDS were derived from literature sources and regulatory documents believed to be accurate and authoritative. The purpose of this MSDS is to serve as a general guide to users of this product. It is the user's responsibility to comply with all federal, state, and local regulations. The user must satisfy requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and any other applicable occupational health and environmental regulations. This MSDS is not intended as a total regulatory compliance document, nor should it be construed as a license or a recommendation to violate any law or infringe on any patent. The user (not the supplier) is uniquely positioned to know the conditions of use, and assumes responsibility for process safety and health. Comprehensive Safety Compliance, Inc. (CSC; Occupational Health and Safety Consultant) and Weldon Materials, Inc. shall not be liable for user errors associated with the use of this product. CSC and Weldon Materials, Inc. make no warranty, expressed or implied, regarding the use by others of this product, and shall not be liable for incidental or consequential damages in connection this product.

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