

MATERIAL SAFETY DATA SHEET

PREPARED ACCORDING TO OSHA HAZARD COMMUNICATION REGULATIONS (29 CFR 1910.1200).

TRADE NAME: Roofing Asphalt / NO SMELL Asphalt

CHEMICAL FAMILY: ASPHALT

UNITED ASPHALTS (www.unitedasphalts.com)

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CAUTIONS: HOT ASPHALT MAY EMIT TOXIC HYFROGEN SULFIDE GAS (H2S), AN EXTREMELY FLAMMABLE,

HIGHLY TOXIC GAS. H2S MAY ACCUMULATE IN STORAGE AND BULK TRANSPORT COMPARTMENTS.

AT LOW CONCENTRATIONS H2S IS IRRITATING TO THE EYES AND THROAT AND AT HIGH

CONCENTRATIONS CAN CAUSE RAPID UNCONSCIOUSNESS AND DEATH. THE ROTTEN-EGG ODOR OF H2S IS NOT A RELIABLE INDICATOR OF CONCENTRATION BECAUSE YOUR SENSE OF SMELL IS RAPIDLY DESENSITIZED TO IT AND THE ODOR MAY BE MASKED BY THE ODOR OF THE ASPHALT.

SIGNS AND SYMPTOMS OF OVERDOSE TO H2S INCLUDE RESPIRATORY TRACT IRRITATION,

HEADACHES, DIZZINESS, NAUSEA, GSTROINTESTINAL DISTURBANCES, COUGHING, A SENSATION OF DRYNESS AND PAIN OF THE NOSE, THROAT AND CHEST, CONFUSION AND UNCONSCIOUSNESS.

H2S CONCENTRATIONS OF 1000-2000 PPM CAN BE EXTREMELY HAZARDOUS. DEATH HAS

OCCURRED FOLLOWING EXPOSURE TO 600 PPM. AVOID BREATHING FUMES. USE VENTILATION OR WORK UPWIND FROM SOURCE OF FUMES OR VAPORS. PROLONGED OR REPEATED SKIN CONTACT

COULD BE HARMFUL. KEEP OUT OF REACH OF CHILDREN.

TYPICAL COMPOSITION: OXIDIZED ASPHALT (CAS 64742-93-4)

EXPOSURE STANDARD:

THE FEDERAL OSHA EXPOSURE STANDARD FOR HYDROGEN SULFIDE (H2S) IS 20 PPM (A CEILING VALVE), IT MAY BE EXCEEDED (UP TO 50 PPM) FOR 10 MINUTES IN ANY 8-HOUR PERIOD IN WHICH NO OTHER MEASURABLE EXPOSURE OCCURS. THE ACGIH TLV FOR HYDROGEN SULFIDE IS 1PPM (8-HOUR TIME WEIGHTED AVERAGE), AND THE ACGIH SHORT-TERM EXPOSURE LIMIT (STEL) IS 5 PPM.

SECTION 1: PHYSIOLOGICAL & HEALTH EFFECTS

EYES: THE COOL SOLID MATERIAL MAY CAUSE EYE IRRITATION. THERMAL BURNS MAY

RESULT FROM CONTACT WITH HOT MATERIAL. FUMES MAY CAUSE IRRITATION, REDNESS, OR

BLURRED VISION.

SKIN: THE COOL SOLID MATERIAL MAY CAUSE MINOR SKIN IRRITATION. THERMAL

BURNS MAY RESULT FROM CONTACT WITH HOT MATERIAL. LONG-TERM SKIN EXPOSURE TO ASPHALT MAY CAUSE DRYNESS, SKIN IRRITATION, AND DISCOLORATION, AND CAN INCREASE

SENSITIVITY TO THE SUN.

INHALATION: FUMES FROM THE HOT MATERIAL CAN BE UNPLEASANT AND MAY PRODUCE

NAUSEA AND IRRITATION OF THE UPPER RESPIRATORY TRACT. FUMES FROM THE HOT MATERIAL MAY CONTAIN H2S, WHICH MAY COLLECT IN ENCLOSED SPACES. BREATHING H2S MAY RESULT IN RESPIRATORY TRACT IRRITATION, HEADACHE, DIZZINESS, NAUSEA, GASTROINTESTINAL DISTURBANCES, COUGHING, A SENSATION OF DRYNESS AND PAIN IN THE NOSE, THROAT, AND

CHEST, CONFUSION AND UNCONSCIOUSNESS. AT LOW CONCENTRATIONS, H2S CAN IRRITATE THE EYES AND RESPIRATORY TRACT, AND MAY CAUSE NERVOUSNESS, COUGH, NAUSEA, AND HEADACHE. PROLONGED EXPOSURE TO CONCENTRATIONS BETWEEN 250-600 PPM, MAY CAUSE PNEUMONIA. BRIEF EXPOSURE TO CONCENTRATIONS ABOVE 500 PPM CAN CAUSE UNCONCIOUSNESS AND MAY BE FATAL.

SECTION 2: EMERGENCY & FIRST AID PROCEDURES

EYES: IF THE HOT MATERIAL SPLASHES INTO THE EYES, FLUSH EYES IMMEDIATELY WITH COOL WATER

FOR AT LEAST 15 MINUTES, OCCASIONALLY LIFTING EYELIDS. IF IRRITATION PERSISTS, CONTACT A

PHYSICIAN.

SKIN: IF THE HOT MATERIAL GETS ON SKIN, DO NOT ATTEMPT TO REMOVE IT AS IT MAY PULL AWAY

THE SKIN. COOL AFFECTED AREA IMMEDIATELY WITH WATER OR ICE. DO NOT USE ICE OR ICED WATER IF BURNED AREA COVERS MORE THAN 10% OF THE BODY AS THIS MAY CONTRIBUTE TO SHOCK. SEEK IMMEDIATE MEDICAL ATTENTION. MEDICAL PROFESSIONALS MAY ATTEMPT TO GENTLY DISSOLVE ASPHALT WITH VASELINE OR OTHER PETROLEUM JELLY TO REMOVE.

INHALATION: IF THERE ARE SIGNS OR SYMPTOMS AS DESCRIBED IN THIS MSDS DUE TO BREATHING THIS

MATERIAL, REMOVE VICTIM TO FRESH AIR. ADMINISTER OXYGEN OR ARTIFICAL RESPIRATION IF REQUIRED. IF LUNG IRRITATION DEVELOPS SEEK MEDICAL AID. IF HAVING DIFFICULTY

BREATHING GIVE OXYGEN AND SEEK IMMEDIATE MEDICAL ATTENTION.

INGESTION: DO NORT INDUCE VOMITTING, OREVENT ASPIRATION OF ASPHALT INTO LUNGS. SEEK IMMEDIATE

MEDICAL ATTENTION.

SECTION 3: SPECIAL PROTECTIVE INFORMATION

EYE PROTECTION:

DO NOT GET HOT MATERIAL IN EYES. EYE CONTACT CAN BE AVOIDED BY WEARING CHEMICAL SAFETY GOOGLES OR A FACE SHIELD.

SKIN PROTECTION:

AVOID SKIN CONTACT WITH HOT MATERIAL BY WEARING LONG SLEEVES, GLOVES, AND LONG PANTS WHEN HANDLING AND APPLYING MATERIAL.

RESPIRATORY PROTECTION:

NO SPECIAL RESPIRATORY PROTECTION IS NORMALLY REQUIRED. HOWEVER, IF OPERATING CONDITIONS CREATE AIRBORNE CONCENTRATIONS, WHICH EXCEED THE EXPOSURE STANDARD, THE USE OF AN APPROVED RESPIRATOR IS RECOMMENDED. NOTE: IF ANY OF THE APPLICABLE H2S STANDARDS ARE LIKELY TO BE EXCEEDED, POSITIVE SUPPLIED- AIR RESPIRATORY PROTECTION

MUST BE USED.

VENTILATION: USE THIS MATERIAL ONLY IN WELL VENTILATED AREAS.

SECTION 4: FIRE PROTECTION

FLASH POINT: (COC) 525 F (MIN)

AUTO-IGNITION TEMP: 700 F (APPROXIMATELY)

FLAMMABILITY LIMITS: N/A

EXTINGUISHING MEDIA:

TREAT AS A FUEL OIL FIRE. USE FOAM, CO2 OR DRY CHEMICAL EXTINGUISHING MEDIA. DO NOT ATTEMPT TO EXTINGUISH WITH WATER OR OTHER LIQUIDES. CONTAIN SPILLS WITH SAND OR SOIL UNTIL SOLIDIFIED. DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. DO NOT ENTER ANY ENCLOSED OR CONFINED FIRE SPACE WITHOUT PROPER PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS. SEE HAZARDOUS DECOMPOSITION OF PRODUCTS.

SECTION 5: ENVIRONMENTAL PROTECTION

ENVIRONMENTAL IMPACT:

THIS MATERIAL IS NOT EXPECTED TO PRESENT ANY ENVIRONMENTAL PROBLEMS.

PRECAUTIONS IF MATERIAL IS RELEASED OR SPILLED:

IF LIOUID MATERIAL IS SPILLED, ALLOW IT TO COOL AND SOLIDIFY BEFORE PROCEEDING WITH DISPOSAL METHODS. CLEAN UP SPILLS IMMEDIATELY, OBSERVING PRECAUTIONS IN SPECIAL PROTECTIVE INFORMATION AND ON PRODUCT LABEL.

WASTE DISPOSAL METHODS:

PLACE CONTAMINATED MATERIALS IN DISPOSABLE CONTAINERS AND DISPOSE OF IN A MANNER CONSISTENT WITH APPLICABLE REGULATIONS. CONTRACT LOCAL ENVIRONMENTAL OR HEALTH AUTHORITIES FOR APPROVED DISPOSAL OF THIS MATERIAL.

SECTION 6: SPECIAL PRECAUTIONS

DO NOT USE OR STORE NEAR FLAMES, SPARKS OR HOT SURFACES. USE ONLY IN WELL VENTILATED AREA. KEEP CONTAINER CLOSED. TOXIC QUANTITIES OF HYDROGEN SULFIDE (H2S0 MAY BE PRESENT IN STORAGE TANKS AND BULK TRANSPORT VESSELS WHICH CONTAIN OR HAVE CONTAINED HOT ASPHALT. PERSONS OPENING OR ENTERING THESE COMPARTMENTS SHOULD FIRST DETERMINE IF (H2S) IS PRESENT. SEE SPECIAL PROTECTIVE INFORMATION. DO NOT ATTEMPT TO RESCUE WITHOUT WEARING SUPPLIED-AIR OR SELF-CONTAINED BREATHING EQUIPMENT. DO NOT ADD OR ALLOW WATER TO MIX WITH HOT ASPHALT. STEAM GENERATED ERUPTIONS MAY OCCUR. YOU SHOULD STORE AND TRANSPORT ASPHALT ONLY IN PROPERLY VENTER CONTAINERS. COMBUSTIONS OF ASPHALT AND ASPHALT VAPORS MAY OCCUR. DO NOT MISHANDLE ASPHALT EQUIPMENT. OBSERVE MANUFACTURER'S GUIDELINES OR PROPER EQUIPMENT USE. AN IGNITION SOURCE SHOULD BE CONSIDERED PRESENT IN LARGE TANK WHERE ASPHALT IS STORED AT TEMPERATURES ABOVE 350 F. DEPOSITS CAN FORM IN THE VAPOR SPACE OF LARGE ASPHALT TANKS WHICH MAY IGNITE AS LOW AS 350 F. PYROPHORIC IRON SULFIDE MAY CAUSE IGNITION BELOW 350 F.

SECTION 7: REACTIVITY DATA

STABILITY: (THERMAL, LIGHT, ETC.) STABLE

INCOMPATIBILITY

(MATERIALS TO AVOID) MAY REACT WITH STRONG OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS:

NORMAL COMBUSTION FORMS CARBON DIOXIDE AND WATER, AND MAY PRODUCE OXIDES OR SULFUR AND NITROGEN. INCOMPLETE COMBUSTION CAN PRODUCE CARBON DIOXIDE.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 8: PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY: SOLUBLE IN HALOGENATED HYDROCARBONS AND BENZENE; INSOLUBLE IN WATER AND

ALCOHOLS.

APPEARANCE: (COLOR, ODOR, ETC.) BROWN/BLACK, SEMI-SOLID WITH LOW ODOR.

BOILING POINT: 650-1000+ F (MIN)(IBP)

MELTING POINT: N/A

SPECIFIC GRAVITY: 1.00 -1.05 @15.6/15.6 C

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

EVAPORATION: N/A

VISCOSITY: 500-1000+ CSI @ 350F. SOLID AT AMBIENT TEMPERATURE.

SOFTENING POINT:

210-225 F TYPES 4

185-205 F TYPES 3

158-176 F TYPES 2

135-151 F TYPES 1

PHYSICAL STATE: SOLID

ADDITIONAL HEALTH DATA

CARCINOGENICITY:

IN OCTOBER 2011, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) CLASSIFIED OCCUPATIONAL EXPOSURES TO OXIDIZED BITUMEN (ASPHALT) AND ASPHALT EMISSIONS DURING ROOFING AS PROBABLY CARCINOGENIC TO HUMANS. BASED ON A 2000 REVIEW OF HEALTH EFFECTS LITERATURE, NIOSH CONCLUDED THAT ROOFING ASPHALT FUMES ARE POTENTIAL OCCUPATIONAL CARCINOGEN. SKIN CONTACT AND BREATHING OF MIST, FUMES, OR VAPORS SHOULD BE REDUCED TO A MINIMUM. WE STRONGLY RECOMMEND THAT THE PRECAUTIONS OUTLINED IN THIS MSDS BE FOLLOWED WHEN HANDLING THIS MATERIAL.

DISCLAIMER:

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