

Safety Data Sheet

Name of Product OXI-BOND

SDS Date: 4-29-2015

Date Superseded: 4-4-2014

Section 1: Product and Company Identification

Product Name: Oxi-Bond Primer

Manufacturer's Name: Maintenance, Inc.

Address: 1051 W Liberty St, Wooster, Ohio 44691

Phone: 1-800-892-6701 or 330/264-6262 (Maintenance, Inc.)

Chemical Emergency only: 800-424-9300

Formula: 111287

Product Use: Pavement Coating Primer

Section 2: Hazards Identification

Label Elements:

Hazard Pictogram:



Appearance: Dark Olive Green

Physical State: Liquid

Odor: Refined Tar

Signal Word: Danger

Hazard Statement: Skin and eye irritant. Harmful or fatal if swallowed. Using this product will expose you to a chemical known to the state of California to cause cancer.

Potential Health Effects:

Eyes: Fumes or direct contact may cause eye irritation, which, without recommended first aid may result in severe burns.

Skin: Prolonged or repeated contact may cause skin irritation and/or dermatitis or more harmful effects. When not washed off or when accentuated by sunlight, skin contact with the product or product volatiles may result in burns, which may be severe.

Swallowing: Swallowing these materials can cause irritation of the mouth, throat and stomach. Nausea, vomiting and diarrhea may result from ingestion. May be fatal in large amounts.

Inhalation: Breathing the fumes from these materials, particularly when they are heated and/or in an enclosed space may cause headache, nausea, and feelings of dizziness or weakness. Fumes from these materials can irritate the nose, throat and lungs. Prolonged exposure to highly concentrated levels of fumes may result in loss of consciousness and in rare instances, death as a result of being unable to breathe.

Prevention: Do not breathe fumes, sprays or vapors. Wash hands after handling. Wear protective gloves and clothing and eye and face protection. Do not eat, drink, or smoke when using this product. Wash or throw away contaminated clothing after use.

Response: See 4. FIRST AID MEASURES

Storage: Store locked up.

Disposal: Dispose of unused product in accordance with all federal, state and local organizations.

Ecotoxicity: This product may cause adverse environmental effects is used improperly or released to the environment through a spill. Coal tar driveway sealer is a marine pollutant and should be placarded as such when transported in bulk (119 gallons or greater in a single package) over sea or large bodies of water.

Section 3: Composition and Information on Ingredients

<u>Ingredients</u>	<u>CAS Number</u>	<u>% By Weight</u>
Coal Tar Pitch	65996-93-2	10-12
Clay (Kaolin)	1332-58-7	3-5
Phenanthrene	85-01-8	<1.0
Napthalene	91-20-3	<0.49
Benz(a)anthracene	56-55-3	<0.32
Indendo(1,2,3-CD)pyrene	193-39-5	<0.30
Benzo(b)flouranthene	205-99-2	<0.26
Benzo(a)pyrene	50-32-8	<0.26
Benzo(j)flouranthene	205-82-3	<0.22
Benzo(k)flouranthene	207-08-9	<0.20
Dibenzo(a,e)pyrene	192-65-4	<0.11

Section 4: First Aid Measures

Eyes: If these materials get into the eyes, flush the person's eyes with large amounts of water for at least fifteen (15) minutes. Be certain to lift the upper and lower lids to ensure that all of the material is flushed out of the eyes. Contact a physician.

Skin: Immediately remove any contaminated clothing and wash the affected areas of the skin with soap and water. Launder contaminated items of clothing before wearing. If skin irritation or redness persists or develops after exposure, contact a physician.

Inhalation: Move the individual to fresh air away from the fumes. If he/she is having difficulty breathing or is not fully conscious, administer oxygen or artificial respiration as needed and obtain immediate medical attention.

Swallowing: DO NOT induce vomiting. Vomiting can cause the material to be aspirated into the lungs, causing chemical pneumonitis. This can be fatal. Keep the person warm and quiet and give water or clear fluids. Obtain immediate medical attention.

Section 5: Fire Fighting Measures

Flammability: Not flammable

Extinguishing Method: Carbon dioxide foam, dry chemical and water fog. Carbon dioxide will displace air in confined spaces and may cause an oxygen deficient atmosphere.

Unsuitable Extinguishing Method: Use of water spray during firefighting may be inefficient.

Combustion Products: Hydrogen sulfide, Carbon monoxide, carbon dioxide, Sulphur oxides and Polycyclic aromatic hydrocarbon.

Fire and Explosion Hazards: Sensitivity to mechanical impact: None Sensitivity to static discharge: Not available.

Special Precautions for Fire Fighters and Protective Equipment: A self-contained breathing apparatus with a full-face piece operating in a positive pressure mode may be required. Avoid using a water stream to prevent frothing. Water or foam may cause frothing which can be violent and may present a life-threatening situation. Cool exposed containers to prevent steam pressure buildup and rupture.

Section 6: Accidental Spill or Leak Procedures

Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Deny entry to unprotected personnel.

Methods for Containment and Clean-Up: If applicable, follow applicable emergency response plan for your organization. Ventilate the area. Keep people away. Stop and contain the spill. Minimize skin contact and avoid breathing vapors. Wear respiratory protection, protective clothing, gloves and eye/face protection. Keep product out of sewers or waterways by diking or impounding. Coal tar driveway sealer is a marine pollutant and must be placarded as such when transported in bulk (119 gallons or greater in a single package) over sea or large bodies of water. Contain and soak up with inert absorbent material. Put in a sealed approved container. Dispose of in accordance with federal, state and local regulations. Advise authorities if product has entered waterways or sewers.

Section 7: Handling and Storage

Precautions for Safe Handling: Wear protective clothing, gloves and OSHA approved eye protection and use good industrial hygiene practices. Avoid breathing vapors. Do not eat, drink or smoke when using this product. Wash thoroughly after use.

Storage: Store in a well ventilated area away from heat and flame. Dispose of used containers according to local, state and federal requirements. Securely replace lid on container when not in use. Keep from freezing. Keep out of reach of children.

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines: The following occupational exposure guidelines are for the major ingredients in this material. The Permissible Exposure Limit (PEL) and Threshold Limit Value (TLV) are expressed in milligrams per cubic meter (mg/m^3) of the ingredient in the work air.

<u>Ingredient</u>	<u>PEL</u>	<u>TLV</u>
Coal Tar Pitch Volatiles	0.2 mg/m^3 TWA	0.2 mg/m^3 TWA, A1
Phenanthrene	N/A	N/A
Napthalene	N/A	10ppm TWA, Skin, A3
Benz(a)anthracene	N/A	As low as possible, A2
Indendo(1,2,3-cd)pyrene	N/A	N/A
Benzo(b)flouranthene	N/A	As low as possible, A2
Benzo(a)pyrene	N/A	As low as possible, A2
Benzo(j)flouranthene	N/A	N/A
Benzo(k)flouranthene	N/A	N/A
Dibenzo(a,e)pyrene	N/A	N/A
Clay (kaolin)	15 mg/m^3 TWA Total 5 mg/m^3 TWA, Respirable	2 mg/m^3 TWA, Respirable

Engineering Controls: Provide sufficient ventilation (mechanical ventilation such as a general or local exhaust system) to prevent vapors from accumulating and to maintain exposure levels below TLV(s) and maintain a positive flow of fresh air.

Respiratory Protection: Respiratory protection should not be required when handling these products in the open air. However, if these materials are being handled in a confined area, wear a respirator with a NIOSH-approved organic vapor respiratory cartridge, or NIOSH-approved air supplied breathing equipment to prevent inhaling fumes. A respirator is only required when working with this material in a confined or inadequately ventilated area.

Eye and Skin Protection: Wear a face shield or safety glasses, impervious clothing, gloves and shoes. Have eye baths readily available. Do not wear contact lenses. Use of protective creams and sunscreen agents are recommended.

Hygiene Practices: Wash thoroughly after working with this material before eating, drinking, smoking or using bathroom facilities.. Remove and launder contaminated clothing before wearing.

Note: All pigments, fillers, fibers and extenders in this product are totally encapsulated and do not pose a respirable dust hazard during installation and use of this product.

Components referred to herein, may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

Section 9: Physical and Chemical Properties

Appearance: Dark Olive Green liquid

Odor: Coal tar odor

Odor Threshold: Not available

Physical State: Liquid

pH: 7-8

Melting Point: Not available

Initial Boiling Point and Boiling Range: Not available

Flash Point: Not available

Evaporation Rate: Not available

Flammability: Not Flammable

Lower Flammability/Explosive Limit: Not available

Upper Flammability/Explosive Limit: Not available

Vapor Pressure: Not available

Vapor Density: Not available

Relative Density/Specific Gravity: Not available

Solubility: Not available

Partition coefficient: N-octanol/water: Not available

Auto-ignition Temperature: Not available

Decomposition Temperature: Not available

Viscosity: Not available

Percent Volatile, wt %: 75

VOC content, wt %: Not available

Note: These physical data are typical values based on material testing, but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

Section 10: Stability and Reactivity

Hazardous Polymerization: This material will not undergo hazardous polymerization.

Hazardous Decomposition: Hydrogen Sulfide, Carbon Monoxide, Carbon Dioxide, Sulfur Dioxides and Polycyclic aromatic hydrocarbon. This product contains Tetrahydro-3, 5-dimethyl-2H-1, 3.5-thiadiazine-2-thione which decomposes into methylisothiocyanate(MITC), a fumigant and sensitizer.

Chemical Stability: Stable

Incompatibility: Avoid contact with strong acids, oxidizing agents and petroleum products to preserve the quality of this material.

Definition: Hazardous Decomposition: Hazardous decomposition products are formed when a material decomposes (breaks down) because it is unstable, or reacts with common materials such as water or oxygen (in air). This information should be considered when planning storage and handling procedures.

Section 11: Toxicological Information

Oral – rat LD50 (mg/kg)	Not available
Dermal – rabbit LD50 (mg/kg)	Not available
Eye irritation – rabbit	Not available
Skin irritation – rabbit (24-hr exposure)	Not available

Note: Coal tar pitch volatiles, soots, tars and oils are listed as carcinogenic category by OSHA, ACGIH, the National Toxicological Program (NTP) and the International Agency for Research on Cancer (IARC). Prolonged or repeated contact may lead to dermatitis; and with poor hygienic practices, to more serious skin disorders such as ulcerations, benign skin growths and skin cancer.

Local Effects

Napthalene (91-20-3)
Irritant: inhalation, skin, eye

Component Analysis – LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints published:

Napthalene (91-20-3)
Inhalation LC50 Rat >340 mg/m³ 1 h; Oral LD50 Rat 490 mg/kg; Dermal LD50 Rat >2500 mg/kg; Dermal LD50 Rabbit >20 g/kg

Acute Toxicity Level

Napthalene (91-20-3)
Toxic: ingestion

Component Carcinogenicity

Napthalene (91-20-3)
ACGIH: A4 – Not Classifiable as Human Carcinogen
NTP: Reasonably Anticipated to be a Human Carcinogen (Possible Select Carcinogen)
IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

Target Organs (Coal Tar Pavement Sealer Base)

Target organs include respiratory system, skin, eyes, bladder, and scrotum.

Target Organs (Coal Tar Pavement Sealer Base Components)

Napthalene (91-20-3)
Blood, immune system (sensitizer)

Medical Conditions Aggravated by Exposure based on Product (Coal Tar Pavement Sealer Base) and Component (Napthalene) Information:

Respiratory disorders, skin disorders and allergies, central nervous systems disorders (i.e. headache, drowsiness, dizziness, loss of coordination), immune system disorders of allergies, metabolic disorders.

Additional Information (Coal Tar Pavement Sealer Base)

This product is coal tar pitch. Volume 35 of the IARC monograph states that there is sufficient evidence that coal tar pitches are carcinogenic in humans. IARC's conclusion is based upon studies suggesting an association between skin cancer and chronic occupational dermal exposure to coal tar pitches and upon other historical studies and anecdotal reports showing an association between dermal exposure to coal tar pitch and scrotal cancer in the absence of good hygiene practices.

Epidemiological studies of aluminum reduction workers showed an excess risk of developing bladder cancer for workers with chronic inhalation overexposure to coal tar pitch volatiles in excess of the recommended permissible exposure level. Studies also suggest an association between lung cancer and chronic inhalation overexposure to coal tar pitch volatiles in excess of the recommended permissible exposure level. A recent animal study may suggest an association between lung cancer and pulmonary deposition of particulate matter originating from coal tar pitches. It is not anticipated, however, that use of this product in liquid form will create a respirable dust.

In addition to containing information about the coal tar pavement sealer base as a whole, this data sheet also contains information about individual components of the coal tar pavement sealer base. Information of this nature may not have been derived from studies or data relating to this coal tar pavement sealer base and/or may have been derived from studies or data that did not involve human exposure and involved animal exposure only.

Additional Information Based on Component Data (Coal Tar Pavement Sealer Base Components)

May cross the placenta. Exposure of the chemical to visible or ultraviolet light may enhance the toxic effects. Some polycyclic aromatic hydrocarbons (PAH's), found in coal tar complex substances, have been reported to cause lung and skin cancer in humans under conditions of poor hygiene, prolonged/repeated contact, and exposure to sunlight. The National Toxicology Program (NTP) and IARC have independently classified various PAH compounds present in coal tar substances as reasonably anticipated to be human carcinogens (NTP), probably carcinogenic to humans (IARC Group 2A), possibly carcinogenic to humans (IARC Group 2B), and not classifiable as to carcinogenicity to humans (IARC Group3). The cancers reported in the studies upon which IARC based its conclusions involved lung, skin, liver, stomach, kidneys, lungs, blood and lymph systems. Some PAH's have also been associated with impaired fertility, heritable genetic damage and birth defects in mice.

Section 12: Ecological Information

Ecotoxicity: This product may cause adverse environmental effects if used improperly or released to the environment through a spill.

Persistence to Degradability: Not available

Biaccumulative Potential: Not available

Mobility in Soil: Not available

Employ best management practices to prevent this material from entering storm sewer systems, waterways or otherwise impacting plant and animal species.

Component Analysis – Aquatic Toxicity

Napthalene (91-20-3)

Fish: 96 Hr LC50 Pimephales promelas: 5.74 – 6.44 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus Mykiss: 1.6 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 0.91 - 2.82 mg/L [static]; 96 Hr LC50 Pimephales promeles: 1.99 mg/L [static]; 96 Hr LC50 Lepomis macrochrius: 31.0265 mg/L [static]

Algae: 72 Hr EC50 Skeletonema costatum: 0.4 mg/L

Invertebrate: 48 Hr LC50 Daphnia magna: 2.16 mg/L; 48 Hr EC50 Daphnia magna: 1.96 mg/L [flow through]; 48 Hr EC50 Daphnia magna: 1.09 – 3.4 mg/L [static]

Benz(A)anthracene (56-55-3)

Invertebrate: 96 Hr LC50 Daphnia magna: 0.01 mg/L [static]; 48 Hr EC50 Daphnia magna: 0.0042 mg/L

Section 13: Disposal Considerations

This product, when discarded or disposed of, is not specifically listed as a hazardous waste in federal regulations. It could be designated as a hazardous waste according to state regulations. This product could also become a hazardous waste if it is mixed with or comes in contact with a hazardous waste. If such contact occurs, consult 40 CFR, to determine whether it is a hazardous waste.

The transportation, storage, treatment and disposal of this waste must be conducted in accordance with all applicable federal, state and local regulations.

Section 14: Transport Information

DOT Description:

Proper Shipping Name:	Not regulated by DOT as a hazardous substance.
Hazard Class:	None
UN Number:	None
NA Number:	None

Coal tar driveway sealer is a marine pollutant and should be placarded as such when transported in bulk (119 gallons or greater in a single package) over sea or large bodies of water. US regulations require reporting of spills of this material that could reach any surface waters. The toll-free phone number for the US Coast Guard National Response Center is 800-424-8802.

Section 15: Regulatory Information

TSCA INVENTORY: Complies
 DSL INVENTORY: Complies
 WHMIS INVENTORY: Complies
 SARA HAZARD NOTIFICATION:
 Hazardous Categories Under Title III Rules (40 CFR 370): Not applicable
 Section 302 Extremely Hazardous Substances: Not applicable
 Section 313 Toxic Chemical(s): Yes

	Section 313	Cercla
Coal Tar Pitch	Not Listed	Not Listed
Clay (Kaolin)	Not Listed	Not Listed
Phenanthrene	Yes	Yes
Napthalene	Yes	Yes
Benz(a)anthracene	Yes	Yes
Indendo(1,2,3-CD)pyrene	Yes	Yes
Benzo(b)flouranthene	Yes	Yes
Benzo(a)pyrene	Yes	Yes
Benzo(j)flouranthene	Yes	Not Listed
Benzo(k)flouranthene	Yes	Yes
Dibenzo(a,e)pyrene	Yes	Not Listed
Chronic Health Hazard		Yes

CERCLA REPORTABLE QUANTITY:	<u>Component</u>	<u>% by Weight</u>
	Napthalene	<0.1%
	Phenanthrene	Approx 1.3%
	PAC polycyclic aromatic compounds	<0.1%

CA Proposition 65 Warning: This product contains chemicals known to the State of California to cause cancer, birth defects, and/or other reproductive harm.

Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

Section 16: Other Information

<u>NFPA Classification Rating</u>	<u>HMIS Classification</u>	<u>Hazard</u>
Health 1	Health 1	0 – Least
Fire 0	Fire 0	1 – Slight
Reactivity 0	Reactivity 0	2 – Moderate
Other: -	Personal Prot *	3 – High
		4 – Extreme

*See Section 8 of this SDS for guidance in selection of personal protective equipment.

Keep from freezing. Keep out of reach of children. For professional and industrial use only. Always read label plus precautions on back of sales ticket and follow directions carefully. Do not take internally.

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