SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product Name: X-10 Pavement Sealer, All Grades: (X-10 Tar Emulsion, X-10 Tar Plus Sand Emulsion,

X-10 Ready to Use, X-10 Plus), Product codes: 548/542/535/551

Manufacturers Name:

The Extendit Company, Inc.

Address:

601 Jones Street, Youngstown, Ohio 44502

Emergency Phone Number:

Infotrac: 1-800-535-5053; International: +01-352-323-3500

General Information:

330-743-4343

Trade Name: Chemical Family: X-10 Pavement Sealer Coal Tar Pitch Emulsion

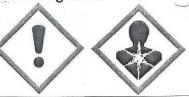
Effective Date: Date Superseded: July 30, 2019

May 2011

2. HAZARDS IDENTIFICATION

Label Elements:

Hazard Pictograms:



Appearance: Black

Physical State: Liquid

Odor: Coal Tar Odor

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 Hazards:

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 if 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.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Ingredients | CAS Number | % By Weight |
|-------------------------|------------|-------------|
| Coal Tar Pitch | 65996-93-2 | 20-40 |
| Clay (Kaolin) | 1332-58-7 | 10-30 |
| Silica Sand** | 14808-60-7 | 5-10 |
| Phenanthrene | 85-01-8 | <2.7 |
| Napthalene | 91-20-3 | <1.32 |
| Benz(a)anthracene | 56-55-3 | <.84 |
| Indendo(1,2,3-CD)pyrene | 193-39-5 | <.81 |
| Benzo(b)flouranthene | 205-99-2 | <.70 |
| Benzo(a)pyrene | 50-32-8 | <.69 |
| Benzo(j)flouranthene | 205-82-3 | <.56 |
| Benzo(k)flouranthene | 207-08-9 | <.52 |
| Dibenzo(a,e)pyrene | 192-65-4 | <.30 |

^{**}Note: Silica sand is an ingredient in only the 551 grade of pavement sealer.

4. FIRST AID MEASURES

<u>Eyes:</u> 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.

<u>Skin:</u> 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.

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.

<u>Combustion Products:</u> Hydrogen sulfide, Carbon monoxide, Carbon dioxide, Sulphur oxides and Polycyclic aromatic hydrocarbon.

<u>Special Precautions for Fire Fighters and Protective Equipment:</u> 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.

6. ACCIDENTAL SPILL OR LEAK PROCEDURES

<u>Personal Precautions:</u> 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.

7. HANDLING AND STORAGE

<u>Precautions for Safe Handling:</u> 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.

<u>Storage:</u> 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.

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/m³) ingredient in the work air.

| <u>Ingredient</u> | PEL | TLV |
|--------------------------|-----------------------------|-----------------------------|
| Coal Tar Pitch Volatiles | 0.2mg/m³ TWA | 0.2mg/m³ TWA, A1 |
| Phenanthrene | N/A | N/A |
| Napthalene | N/A | 10ppm TWA, Skin, A3 |
| Benz(a)anthracene | N/A | As low as possible, A2 |
| Indeno (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/m³ TWA Total | 2 mg/m³ TWA, Respirable |
| | 5 mg/m³ TWA, Respirable | |
| Silica | 0.098 mg/m³ TWA, Respirable | 0.025 mg/m3 TWA, Respirable |
| A1 - Confirmed | Human Carcinogen | |

A1 - Confirmed Human Carcinogen A2 - Suspected Human Carcinogen A3 - Confirmed Animal Carcinogen

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.

<u>Eye and Skin Protection:</u> 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. <u>Hygiene Practices:</u> 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Paste-like compound.

Color: Black

Odor: Coal tar odor.

Odor Threshold: Not available.

Physical State: Liquid.

PH: Not available.

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 applicable.

Upper Flammability/Explosive Limit: Not applicable.

Vapor Pressure: Not available.

Vapor Density: Not available.

Relative Density/Specific Gravity: Not available.

Solubility: Not available.

Partition coeffecient: N-octanol/water: Not available.

Auto-ignition Temperature: Not available.

Decompostion Temperature: Not available.

Viscosity: Not available.

Percent Volatile, wt. %: Not available.

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.

10. STABILITY AND REACTIVITY

Hazardous Polymerization: This material will not undergo hazardous polymerization.

<u>Hazardous Decomposition:</u> Hydrogen sulfide, Carbon monoxide, Carbon dioxide, Sulphur oxides 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.

11. TOXICOLOGICAL INFORMATION

Oral - rat LD50 (mg/kg)

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 a 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 are 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

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Acute Toxicity Level

Napthalene (91-20-3)

Toxic: ingestion

Component Carcinogenicity

Napthalene (91-20-3)

ACGIH: A4 - Not Classifiable as a 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 system disorders (i.e. headache, drowsiness, dizziness, loss of coordination), immune system disorders or 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 (PAHs), found in coal tar complex substances, have been reported to cause lung and skin cancer in humans under conditions of poor personal 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 Group 3). 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 genentic damage and birth defects in mice.

Information on Silica Sand (NOTE: Silica Sand is in the 551 grade of X-10 Pavement Sealer only and is fully encapsulated in pavement sealer and not likely to be released in dust form)

Silicosis: The major concern is silicosis, caused by the inhalation and retention of respirable crystalline silica

dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute.

Chronic or Ordinary Silicosis (Often referred to as Simple Silicosis) is the most common form of silicosis, and can occur after many years of exposure to relatively low concentrations of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis. Lung lesions (shown as radiographic opacities) less than 1 centimeter in diameter characterize simple silicosis, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicate silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Although there may be no symptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortness of breath,

wheezing, cough and sputum production. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pumonale).

Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five years of the initial exposure. The progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that the lung lesions appear earlier and the progression is more rapid.

<u>Acute Silicosis</u> can occur with exposures to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis can be fatal.

Cancer

IARC: The International Agency for Research on Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "sufficient evidence in experimental animals for the carcinogenicity of quartz and cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997).

NTP: The National Toxicology Program (NTP), in its Ninth Annual Report on Carcinogens, classified "silica, crystalline (respirable)" as a known human carcinogen.

OSHA: Crystalline silica (quartz) is not regulted as a human carcinogen by the Occupational Safety and Health Administration (OSHA) as a carcinogen.

<u>California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):</u> Crystalline silica (quartz) is classified as a substance known to the State of California to be a carcinogen.

Canada:

<u>Domestic Substances List (DSL):</u> Best Sand Corporation's products, as naturally occurring substances, are on the Canadian DSL.

WHMIS (Workplace Hazardous Materials Information System) Classification: Class D, Division 2A.

Other:

IARC: Crystalline silica (quartz) is classified in IARC Group 1 Carcinogen.

National, state, provincial or local emergency planning, community right-to-know or other laws, regulations or ordinances may be applicable—consult applicable national, state, provincial or local laws.

12. ECOLOGICAL INFORMATION

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

Persistance 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]; 96Hr 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 promelas: 1.99 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 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

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.

14. TRANSPORTATION 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.

15. REGULATORY INFORMATION

TSCA INVENTORY:

Complies

DSL INVENTORY:

Complies

WHMIS INVENTORY:

Complies

SARA HAZARD NOTIFICATION:

Hazardous Categories Under Title III Rules (40 CFR 370):

Section 302 Extremely Hazardous Substances:

Not applicable Not applicable

Yes

Section 313 Toxic Chemicals(s):

Coal Tar Pitch

Clay (Kaolin)

Section 313 Cercla Not Listed Not Listed Not Listed Not Listed

Silica Sand** Not Listed Not Listed Phenanthrene Yes Yes Napthalene Yes Yes Benz(a)anthracene Yes Yes Yes Yes

Indendo(1,2,3-CD)pyrene 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:

Component

%by Weight

Naphthalene

< 0.1%

Phenanthrene

Approx 1.3%

PAC(polycyclic aromatic compounds)

< 0.1%

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CA Proposition 65 Warning:

This product contains chemicals know 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.

16. OTHER INFORMATION

| NFPA Classi | fication Rating | HMIS Classific | ation | Hazard |
|-------------|-----------------|----------------|-------|--------------|
| Health | 1 | Health | 1 | 0 - Least |
| Fire | 0 | Fire | 0 | 1 - Slight |
| Reactivity | 0 | Reactivity | 0 | 2 - Moderate |
| Other: | | Personal Prot | * | 3 - High |
| | | | | 1 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.

The information contained in this SDS is believed to be accurate as of the time that this document was prepared. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Final determination of suitability of the chemical(s) is the sole responsibility of the user. Users of any chemical should satisfy themselves that the conditions and methods of use assure that the chemical is used safely.

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