



MARDONES - BPB CREOSOTE TREATERS S.A.

**( Do not handle or manipulate the product  
Without carefully reading this information)**

## **MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)**

---

### **1. PRODUCT & COMPANY IDENTIFICATION**

---

#### **PRODUCT IDENTIFICATION**

Product name..... Coal Tar Creosote Pressure Treated Wood  
Application.....Railroad Industry, Utility Industry, Docks, Bridge & Highway construction

#### **MANUFACTURER IDENTIFICATION**

Mardones – BPB Creosote Treaters S.A.  
Yumbel Railroad Station  
Yumbel - VIII Region - Chile

#### **EMERGENCY PHONE NUMBERS (24 Hours)**

56 – 43 – 439072                      56 – 43 – 439144  
56 – 43 – 439145

---

### **2. COMPOSITION / INFORMATION ON INGREDIENTS**

---

#### **2.1 Coal Tar Creosote**

Content..... 0,08 g / cm<sup>3</sup>

CAS Identification.....8001-58-9  
IMIS Identification.....C129  
US DOT Class.....ORM – E  
US DOT Identity.....NA9189

#### **2.2 Fuel Oil, Bunker No. 5**

Content..... 0,05 g / cm<sup>3</sup>

CAS Identification.....8001-58-9  
IMIS Identification.....C129  
US DOT Class.....ORM – E  
US DOT Identity.....NA9189

#### **2.3 Wood**

Content..... 1,17 g / cm<sup>3</sup>



MARDONES - BPB CREOSOTE TREATERS S.A.

( Do not handle or manipulate the product  
Without carefully reading this information)

## MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)

### 3. HAZARDOUS FACTORS IDENTIFICATION

#### EMRGENCY OVERVIEW

*(Related to treated wood or treated wood dust handling)*

**CAUTION:** If treated wood dust is inhaled, injuries in the respiratory system may appear. Permanent and direct contact of creosote treated products with skin may cause allergic reactions such as dermatitis, eczema and boost sunburn reactions. Avoid direct contact with creosote treated wood.

Creosote treated wood combustion produces toxic fumes and gases. Fire or spark exposure of creosote treated wood particles may cause ignition of the cumulate product. In case of fire, use water spray, fog, foam, dry chemical, or CO<sub>2</sub>. Avoid burning creosote treated wood.

#### POTENTIAL HEALTH EFFECTS

##### ACCESS PATHS TO THE ORGANISM

Inhanaliton – Skin contact – Ingestion

**WARNING:** Prolonged exposure to creosote present in wood or in treated wood sawdust can lead to inflammation of the nasal passages (rhinitis), lung disease (bronchitis), or asthma. Contact with the preservative in treated wood causes eye and skin irritation. Dust may cause eye or skin irritation. Repeated or prolonged exposure may cause conjunctivitis (eye), or allergic dermatitis (skin).

##### EXPOSURE SYMPHOMS

*(Related to treated wood or treated wood dust exposure)*

**Inhalation:** Harmful if wood dust or preservative vapors or mist are inhaled; may cause irritation to the nose, throat, and lungs. Prolonged exposure can lead to inflammation of the nasal passages (rhinitis), lung disease (bronchitis), or asthma.

**Eye contact:** tearing, burning and pain. Repeated or prolonged exposure to creosote vapors may cause conjunctivitis.



MARDONES - BPB CREOSOTE TREATERS S.A.

## MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)

**( Do not handle or manipulate the product  
Without carefully reading this information)**

**Skin contact:** skin inflammation, itching, erythema redness, scaling or allergic dermatitis.

### REPORTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

Not Applicable OSHA

3 National Toxicology Program (NTP) 3 International Agency for Research on Cancer (IARC)

(See Section 11)

---

## 4. FIRST AID MEASURES

---

**Inhalation:** Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

**Eye contact:** Immediately rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Hold eyelids apart to ensure rinsing of the entire surface of the eyes and lids with water. Get immediate medical attention.

**Skin Contact:** Wash affected areas with plenty of water, and soap if available, for 15 minutes. Remove contaminated clothing and shoes. Get immediate medical attention. Wash clothing and decontaminate shoes before reuse.

**Ingestion:** Give 3-4 glasses of water. Induce vomiting by placing a finger or blunt object on the back of the victim's tongue. Give fluids until vomitus is clear. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person. Seek medical attention.

### NOTE TO PHYSICIAN

Chemical of exposure is wood treated with coal tar creosote or dust from this wood. Both the preservative, coal tar creosote, and wood dust are eye, skin, and respiratory tract irritants. Creosote may result in a sunlight induced phototoxic skin reaction. Wood dust is a potential respiratory and skin sensitizer.

---

## 5. FIRE FIGHTING MEASURES

---

Flash Point and Method..... N/A

### GENERAL HAZARD

Fine particles of wood dust are a strong to severe explosion hazard. Burning coal tar creosote treated wood can produce toxic and irritating gases or fumes.

### EXTINGUISHING MEDIA

For small fires, use water spray, foam, CO<sub>2</sub>, or dry chemical. For large fires, use water spray, fog, or alcohol foam.

### SPECIAL FIREFIGHTING INSTRUCTIONS

Use water to wet down wood dust to prevent generation of dust clouds. Remove burnt or wet wood dust to an open area after fire is extinguished.



MARDONES - BPB CREOSOTE TREATERS S.A.

## **MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)**

**( Do not handle or manipulate the product  
Without carefully reading this information)**

### **FIREFIGHTING EQUIPMENT**

As in any fire, wear NIOSH approved, positive-pressure self-contained breathing apparatus and full protective gear.

---

### **6. ACCIDENTAL RELEASE MEASURES**

---

Wear appropriate protective equipment (See Section 8).

#### **ON LAND**

Avoid generating dust. Sweep up dust and place in a container for later disposal.

---

### **7. HANDLING AND STORAGE**

---

#### **HANDLING**

Wear appropriate protective equipment (See Section 8). Avoid breathing dust and contact with eyes or skin. Wash thoroughly after handling, and before eating, smoking and using the toilet.

#### **STORAGE**

Store in a dry place, away from heat, sparks, flame, or other sources of ignition and dried weeds or other flammable material. Keep away from oxidizers.

#### **Protect human health and product quality following the instructions indicated below:**

1. Storage creosote pressure treated wood away from direct exposure to sun rays in a roofed area.
  2. Do not remove the packing plastic film wrapping bundles until the product is ready to be installed.
  3. Storage the product in balanced stacks, 12 inches (304. 8 mm) away from the floor, up to 12'- 1 ½" (400 mm) in height.
  4. Do not trim, drill or saw treated wood. Any adzing, preboring or rebating required on the wood, should be performed meeting drawing or blueprints, at the treating plant, before the treating process.
  5. Do not distribute the treated product along the railway tracks when track crews are not ready to instal them.
- 

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

#### **ENGINEERING CONTROLS**

If user operations generate wood dust, use explosion-proof ventilation equipment to assure airborne levels are below established exposure limits. Use local exhaust and general ventilation techniques to assure that exposure levels of creosote are met.



MARDONES - BPB CREOSOTE TREATERS S.A.

## MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)

**( Do not handle or manipulate the product  
Without carefully reading this information)**

### PERSONAL PROTECTION

**Respirator:** In operations that generate dusts or preservative vapors which may exceed exposure limits,

use a NIOSH approved respirator that has been selected by an industrial hygienist or other technically qualified person for the specific work conditions. If respirators are used, OSHA requires compliance with its Respiratory Protection Standard (29 CFR 1910.134).

**Eye Protection:** Wear safety glasses or vented safety goggles.

**Gloves:** To protect exposed skin against the phototoxicity of creosote, apply commercially available sun block agents (Sun Protection Factor > 15) under barrier creams. Wear gloves of material that is impermeable to creosote.

**Clothing:** Wear easily washable clothing. Wash clothing after each shift, or more often if clothing becomes contaminated.

**Other:** Eye wash.

### EXPOSURE CONTROLS

COMPONENT	OSHA PEL		ACGIH TLV	
	TWA	STEL	TWA	STEL
Coal tar pitch volatiles, as benzene solubles	0.2 mg/m <sup>3</sup>	N/E	0.2 mg/m <sup>3</sup>	N/E
Wood dust (certain hardwoods as beech & oak)	N/E	N/E	1 mg/m <sup>3</sup>	N/E
Wood dust - Soft wood	N/E	N/E	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

State .....Solid  
 Color .....Varies, depending upon wood species  
 Odor .....Varies, depending upon wood species  
 Vapor Pressure .....N/A  
 Melting Point °C .....N/A  
 Boiling Point °C.....N/A  
 Bulk Density, lb/cu. Ft .....N/D  
 Specific Gravity @ 20 °C...N/A  
 Water Solubility .....N/D  
 pH .....N/A

---

## 10. STABILITY AND REACTIVITY

---

### REACTIVITY

Stable

### INCOMPATIBILITIES

Strong oxidizers.

### HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide and/or carbon dioxide as well as toxic coal tar fumes.



MARDONES - BPB CREOSOTE TREATERS S.A.

## MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)

**( Do not handle or manipulate the product  
Without carefully reading this information)**

### CONDITIONS TO AVOID

Dust generation; sources of ignition.

---

## 11. TOXICOLOGICAL INFORMATION

---

### For Wood Dust:

IARC Cancer Review: Group 1 (carcinogenic to humans.).

For Beech Wood Dust, Extract:

RTECS CT3200000

Dermal TDLo (mouse) .....3,900 gm/kg; Effect: tumorigenic, tumors at site of application.

IARC determined that furniture and cabinet making entail exposures that are carcinogenic to humans (Group 1).

Case reports and epidemiological studies have clearly corroborated an increased risk of nasal adenocarcinoma among workers in the furniture and cabinet-making industry.

IARC evaluated exposures in the pulp and paper industries and determined that these are not classifiable as to their carcinogenicity to humans (Group 3).

Some studies have suggested that workers in the lumber and sawmill industries (including logging), However, IARC concluded that the epidemiological data do not permit a definite assessment.

### For Creosote:

RTECS

Dermal TDLo(mouse) ..... 99 gm/kg33W/I; Effect: tumorigenic.

Oral LD50 (rat)..... 725 mg/kg; Effect: somnolence.

Oral LD50 (mouse) ..... 433 mg/kg; Effects: convulsions and seizures, coma.

Creosote has been categorized as a Group 2A carcinogen (Probably carcinogenic to humans) by IARC. It is listed under "Soots, tars, and mineral oils" as a potential human carcinogen by the National Toxicology Program (NTP).

The Environmental Protection Agency has categorized creosote as Group B1 (probable human carcinogen).

---

## 12. ECOLOGICAL INFORMATION

---

For a 60:40 mixture of creosote and coal tar:

Hazardous Substance Data Bank

24hr. TL50 (rainbow trout) ..... 3.72 ppm

24hr. TL50 (bluegill) ..... 4.42 ppm

24hr. TL50 (goldfish) ..... 3.51 ppm

LD50 (bob white quail).. ..... 1,260 ppm/8 days (unspecified route)

LD50 (mallard duck) ..... 10,388 ppm/8 days (unspecified route)

---

## 13. DISPOSAL CONSIDERATIONS

---

RCRA Waste Code: .....U051 (Creosote)

Treated wood should not be burned in open fires or in stoves, fireplaces, or residential boilers. It may be burned in industrial boilers and incinerators, if allowed under applicable air and hazardous waste permits.

Creosote and hazardous debris contaminated with this preservative are prohibited from land disposal unless



MARDONES - BPB CREOSOTE TREATERS S.A.

## MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)

**( Do not handle or manipulate the product  
Without carefully reading this information)**

treated according to the standards in 40 CFR 268.45  
Observe all applicable federal, state, and local regulations.

---

### 14. TRANSPORT INFORMATION

---

DOT Hazard Class .....Not regulated

TDG Hazard Class .....Not regulated

---

### 15. REGULATORY INFORMATION

---

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

3 Hazardous Non-Hazardous

CERCLA/SUPERFUND (40 CFR 117, 302)

Chemical Name

RQ (lbs)/(kg)

Creosote

1

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355)

Chemical Name TPQ (lbs) RQ (lbs)

N/A

SARA HAZARD CATEGORIES (40 CFR 370)

3 Acute 3 Chronic Fire Pressure Reactive None

SARA TOXIC CHEMICALS (40 CFR 372)

Chemical Name CAS Number %

Creosote 8001-58-9 7-25 lbs/ft<sup>3</sup> (12-

33% by weight,

assuming wood

density of 50

lbs/ft<sup>3</sup>)

**WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (CPR Section (33))**

This product has been classified according to the hazard criteria of the Controlled Products Regulations, and the MSDS contains all required information.

3 Controlled Product; Classification: D2A, D2B Not a Controlled Product

**INVENTORY STATUS**

This chemical is listed on the US TSCA Chemical Substance Inventory and on the Canadian Domestic Substances List.

**TOXIC SUBSTANCES CONTROL ACT**

Wood and wood dusts are listed in the TSCA Inventory under the category "Naturally Occurring Chemical Substances" (40 CFR 710.4(b)); Creosote is listed on the TSCA Inventory.



MARDONES - BPB CREOSOTE TREATERS S.A.

**( Do not handle or manipulate the product  
Without carefully reading this information)**

## **MATERIAL SAFETY DATA SHEET (Coal Tar Creosote Treated Wood)**

---

### **16. OTHER INFORMATION**

---

#### **ABBREVIATIONS**

C - Ceiling limit

LCLo - The lowest concentration of a substance in air that will kill a test animal within a certain exposure period.

LC50 - The concentration of a substance in air that will kill 50% of test animals within a certain exposure period.

LD50 - The dose that causes death in 50% of test animals.

TDLo - Lowest dose at which a specific toxic effect occurs.

TL50 - Concentration or dose of a substance a living organism can endure with ill effects (tolerance limit)

N/A - Not applicable

N/D - Not determined

N/E - Not established

N/K - Not known

NAERG - North American Emergency Response Guidebook

RQ - Reportable Quantity

TPQ - Threshold Planning Quantity

#### **PREPARATION INFORMATION**

MSDS No..... B-5090

Date Revised: ..... July 29, 2002 Replaces: April 30, 1999

Date of Issue: ..... August, 2002

Health and Environmental Protection Organizations

- EPA - US Environmental Protection Agency
  - DHHS - The US Department of Health and Human Services
  - NIOSH - The National Institute for Occupational Safety and Health
  - OSHA - Occupational Safety and Health Administration
  - ACGIH - The American Conference of Governmental Industrial Hygienists
  - ATSDR - Agency for Toxic Substances and Disease Registry
-