



Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

MATERIAL SAFETY DATA SHEETS

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

Product: Coal Tar Solution

This MSDS is valid for all grades and catalog #'s

Synonyms: Not available.

Formula: Not applicable.

Manufacturer: PHARMCO-AAPER
58 Vale Road
Brookfield, Connecticut 06804, USA
Phone (203) 740-3471
Fax (203) 740-3481

1101 Isaac Shelby Drive
Shelbyville, KY 40065
Phone (502) 633-0650
Fax (502) 633-0685

Emergency Contact:
CHEMTREC 1-800-424-9300

SECTION II

COMPOSITION / INFORMATION ON INGREDIENTS

% by weight	Material	CAS #	TLV/PEL	LC50/LD50
81-86	Ethyl alcohol 200 proof	64-17-5	TWA: 1900 (mg/m3) from OSHA (PEL) [United States] TWA 1000 (ppm) from OSHA (PEL) [United States] TWA 1900 (mg/m3) from NIOSH [United States] TWA 1000 (ppm) from NIOSH [United States] TWA:1000 (ppm) [United Kingdom (UK)] TWA: 1920 (mg/m3) [United Kingdom (UK)] TWA 1000 STEL: 1250 (ppm) [Canada]	ORAL (LD50): Acute: 7060 mg/kg [Rat]/ 3450 mg/kg [Mouse]. VAPOR (LC50): Acute: 20000 ppm 8 hours [Rat]. 39000 mg/m3 4 hours [Mouse]

9-14	Coal Tar Distillate	65996-92-1	TWA: 0.2 (mg/m3) from OSHA (PEL) [United States] TWA: 0.2 (mg/m3) [Canada]	Not available
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**SECTION III
HAZARDS IDENTIFICATION**

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion

Potential Chronic Health Effects: Slightly hazardous in case of skin contact (sensitizer).

CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethyl alcohol 200 Proof]. Classified 1 (Proven for human.) by IARC, 1 (Clear evidence; known carcinogen.) by NTP [Coal Tars].

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Ethyl alcohol 200 Proof]. Mutagenic for bacteria and/or yeast. [Ethyl alcohol 200 Proof]. Mutagenic for mammalian somatic cells. [Coal Tar Distillate].

Mutagenic for bacteria and/or yeast. [Coal Tar].
TERATOGENIC EFFECTS: Classified PROVEN for human [Ethyl alcohol 200 Proof].

DEVELOPMENTAL TOXICITY: Classified Development toxin [PROVEN] [Ethyl alcohol 200 Proof]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE] [Ethyl alcohol 200 Proof].

The substance is toxic to blood, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS).

Repeated or prolonged exposure to the substance can produce target organs damage.

**SECTION IV
FIRST AID**

Obtain medical attention for all cases of over-exposure.

Eye Contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an

emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Hazardous Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear.

Hazardous Inhalation: Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Hazardous Ingestion: Not available.

SECTION V FIRE FIGHTING MEASURES

Fire:

Flammability of the Product: Flammable.

Auto-Ignition temperature: The lowest known value is 363°C (685.4°F) (Ethyl alcohol 200 Proof).

Flash point: CLOSED CUP: 17°C (62.6°F).

Flammable limits: The greatest known range is LOWER: 3.3% UPPER: 19% (Ethyl alcohol 200 Proof)

Products of Combustion: These products are carbon oxides (CO, CO₂).

Fire Hazards: Highly flammable in presence of open flames and sparks of heat. Slightly flammable to flammable in presence of shocks, of oxidizing materials.

Explosion Hazards: Risks of explosion of the product in presence of mechanical impact: Not available. Slightly explosive in presence of open flames and sparks, of heat, of oxidizing materials of acids.

Fire Extinguishing Media: Flammable liquid, soluble or dispersed in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.

Special Information: Containers should be grounded.

CAUTION: MAY BURN WITH NEAR INVISIBLE FLAME Vapor may travel considerable distance to source of ignition and flash back. May form explosive mixtures with air. Contact with Bromine pentafluoride is likely to cause fire or explosion. Ethanol ignites on contact with chromyl chloride. Ethanol ignites on contact with iodine heptafluoride gas. It ignites than explodes upon contact with nitrosyl perchlorate. Addition of platinum black catalyst caused ignition. (Ethyl alcohol 200 Proof) Ethanol has an explosive reaction with the oxidized coating around potassium metal. Ethanol ignites and then explodes on contact with acetic anhydride + sodium hydrosulfate (ignites and may explode), disulfuric acid + nitric acid, phosphorous(III) oxide platinum, potassium-tert-butoxide+

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acids. Ethanol forms explosive products in reaction with the following compound : ammonia + silver nitrate (forms silver nitride and silver fulminate), iodine + phosphorus (forms ethane iodide), magnesium perchlorate (forms ethyl perchlorate), mercuric nitrate, nitric acid + silver (forms silver fulminate) silver nitrate (forms ethyl nitrate) silver(I) oxide + ammonia or hydrazine (forms silver nitride and silver fulminate), sodium (evolves hydrogen gas). Sodium Hydrazide + alcohol can produce an explosion. Alcohols should not be mixed with mercuric nitrate, as explosive mercuric fulminate may be formed. May form explosive mixture with manganese perchlorate + 2,2-dimethoxypropane. Addition of alcohols to highly concentrate hydrogen peroxide forms powerful explosives. Explodes on contact with calcium hypochlorite Vapor may explode if ignited in an enclosed area. Containers may explode when heated or involved in a fire.

SECTION VI

SPILL/ACCIDENTAL RELEASE MEASURES

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill: Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

SECTION VII

HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage: Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

SECTION VIII

EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal Protection: Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self

contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Ethyl alcohol 200 Proof TWA: 1900 (mg/m³) from OSHA (PEL) [United States] TWA: 1000 (ppm) from OSHA (PEL) [United States] TWA: 1900 (mg/m³) from NIOSH [United States] TWA: 1000 (ppm) from NIOSH [United States] TWA: 1000 (ppm) [United Kingdom (UK)] TWA: 1920 (mg/m³) [United Kingdom (UK)] TWA: 1000 STEL: 1250 (ppm) [Canada]

Coal Tar Distillate TWA: 0.2 (mg/m³) from OSHA (PEL) [United States] TWA: 0.2 (mg/m³) from ACGIH (TLV) [United States] TWA: 0.2 (mg/m³) [Canada]

Consult local authorities for acceptable exposure limits.

SECTION IX

PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance: Liquid.

Molecular Weight: Not applicable.

Odor: Characteristic aromatic naphthalene like odor

Taste: Not available.

Color: Greenish-brown. Brown. (dark.)

pH (1% Solution in Water): Not available.

Boiling Point: The lowest known value is 78.5°C (173.3°F) (Ethyl alcohol 200 Proof).

Melting Point: May start to solidify at -114.1°C (-173.4°F) based on data for: Ethyl alcohol 200 Proof.

Critical Temperature: The lowest known value is 243°C (469.4°F) (Ethyl alcohol 200 Proof).

Specific Gravity: 0.8438 (Water = 1)

Vapor Pressure (mm Hg): The highest known value is 5.7 kPa (@ 20°C) (Ethyl alcohol 200 Proof).

Vapor Density (Air=1): The highest known value is 1.59 (Air = 1) (Ethyl alcohol 200 Proof).

Volatility: Not available.

Odor Threshold: The highest known value is 100 ppm (Ethyl alcohol 200 Proof)

Evaporation Rate: Not available.

Viscosity: Not available.

Water/Oil Dist. Coefficient: Not available.

Ionicity (in water): Not available.

Dispersion Properties: See solubility in water, methanol, diethyl ether, acetone.

Solubility: Easily soluble in hot water. Soluble in methanol, diethyl ether, acetone. Partially soluble in cold water.

SECTION X

STABILITY/REACTIVITY INFORMATION

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources, incompatible materials

Incompatibilities: Reactive with oxidizing agents, acids, alkalis.

Corrosivity: Not considered to be corrosive for metals and glass.

Special Information: Ethanol rapidly absorbs moisture from the air. Can react vigorously with oxidizers. The following oxidants have been demonstrated to undergo vigorous/explosive reaction with ethanol: barium perchlorate, bromine pentafluoride, calcium hypochlorite, chloryl perchlorate, chromium trioxide, chromyl chloride, dioxygen difluoride, disulfuryl difluoride, fluorine nitrate, hydrogen peroxide, iodine heptafluoride, nitric acid nitrosyl perchlorate, perchloric acid permanganic acid, peroxydisulfuric acid, potassium dioxide, potassium perchlorate, potassium permanganate, ruthenium(VIII) oxide, silver perchlorate, silver peroxide, uranium hexafluoride, uranyl perchlorate. Ethanol reacts violently/expodes with the following compounds: acetyl bromide (evolves hydrogen bromide) acetyl chloride, aluminum, sesquibromide ethylate, ammonium hydroxide & silver oxide, chlorate, chromic anhydride, cyanuric acid + water, dichloromethane + sulfuric acid + nitrate (or) nitrite, hydrogen peroxide + sulfuric acid, iodine + methanol + mercuric oxide, manganese perchlorate + 2,2-dimethoxy propane, perchlorates, permanganates + sulfuric acid, potassium superoxide, potassium tert-butoxide, silver & nitric acid, silver perchlorate, sodium hydrazide, sulfuric acid + sodium dichromate, tetrachlorosilane + water. Ethanol is also incompatible with platinum, and sodium. No really safe conditions exist under which ethyl alcohol and chlorine oxides can be handled. Reacts vigorously with acetyl chloride (Ethyl alcohol 200 Proof)

SECTION XI

TOXICOLOGICAL INFORMATION

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 3450 mg/kg [Mouse]. (Ethyl alcohol 200 Proof).

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethyl alcohol 200 Proof]. Classified 1 (Proven for human.) by IARC, 1 (Clear evidence; known carcinogen.) by NTP [Coal Tars].

MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Ethyl alcohol 200 Proof]. Mutagenic for bacteria and/or yeast. [Ethyl alcohol 200 Proof]. Mutagenic for mammalian somatic cells. [Coal Tars]. Mutagenic for bacteria and/or yeast. [Coal Tar Distillate].

TERATOGENIC EFFECTS: Classified PROVEN for human [Ethyl alcohol 200 Proof].

DEVELOPMENTAL TOXICITY: Classified Development toxin [PROVEN] [Ethyl alcohol 200 Proof]. Classified Reproductive system/toxin/female, Reproductive system/toxin/male [POSSIBLE] [Ethyl alcohol 200 Proof].

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator), of ingestion.

Special Information on Toxicity to Animals: Lowest

Published Dose/Conc: LDL[Human] - Route: Oral; Dose: 1400 mg/kg LDL[Human child] - Route: Oral; Dose: 2000

mg/kg LDL[Rabbit] - Route: Skin: Dose: 20000 mg/kg
(Ethyl alcohol 200 Proof)

Special Information on Chronic Effects/Toxicity on

Humans: May affect genetic material (mutagenic) Causes adverse reproductive effects and birth defects (teratogenic) , based on moderate to heavy consumption. May cause cancer based on animal data. Human: passes through the placenta, excreted in maternal milk. (Ethyl alcohol 200 Proof) Acute Potential Health Effects: Skin: It can cause skin irritation. It is a phototoxic substance that, in presence of ultraviolet light (sunlight) can cause a skin reaction similar to exaggerated sunburn, frequently causing blisters. Eyes: It can cause eye irritation. Inhalation: Inhalation of mist or vapor can irritate the respiratory tract. Ingestion: Ingestion can cause severe gastrointestinal tract irritation with nausea, vomiting. It may also affect behavior/central nervous system and cause central nervous system depression. Aspiration can cause lung inflammation and damage. Chronic Potential Health Effects: Skin: Prolonged or repeated exposure to coal tar may cause irritation and dermatitis (including acne), melanosis, or photosensitization dermatitis. Long-term exposure to coal tar can cause changes in skin pigmentation, growths on skin, or skin cancer. Eyes: Repeated or prolonged exposure may cause eye damage. Inhalation: Prolonged or repeated inhalation may contribute to gallbladder disease, pneumonitis, and pulmonary vessel thrombosis. Inhalation of coal tar aerosols caused liver cancer in rats and liver and lung changes in rats and hamsters. Medial Conditions Aggravated by Exposure: Existing skin disorders (e.g. eczema) may be aggravated by exposure to this material. (Coal Tar) Acute potential health effects: Skin: causes skin irritation Eyes: causes eye irritation Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, and alterations in gastric secretions. May affect behavior/central nervous system (central nervous system depression - amnesia, headache, muscular incoordination, excitation, mild euphoria, slurred speech, drowsiness, staggering gait, fatigue, changes in mood/personality, excessive talking, dizziness, ataxia, somnolence, coma/narcosis, hallucinations, distorted perceptions, general anesthetic), peripheral nervous system (spastic paralysis)vision (diplopia). Moderately toxic and narcotic in high concentrations. May also affect metabolism, blood, liver, respiration (dyspnea), and endocrine system. May affect respiratory tract, cardiovascular(cardiac arrhythmias, hypotension), and urinary systems. Inhalation: May cause irritation of the respiratory tract and affect behavior/central nervous system with symptoms similar to ingestion. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause dermatitis, an allergic reaction. Ingestion: Prolonged or repeated ingestion will have similar effects as acute ingestion. It may also affect the brain. (Ethyl Alcohol)

SECTION XII

ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Information on Products of Biodegradation: Not available.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are: **NONE**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Oven Coke Emissions

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethanol

SECTION XIII

DISPOSAL CONSIDERATIONS

Waste Disposal: Recycle to process, if possible. Consult your local or regional authorities.

SECTION XIV

TRANSPORTATION INFORMATION

DOT Classification: DOT CLASS 3: Flammable liquid.

UN: UNNA: 1170 : Ethanol Solution PG: II

Special Provisions for Transport: Not available.

SECTION XV

REGULATORY INFORMATION

Federal and State Regulations: California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: **Coal Tar Distillate (Listed as Coke Oven Emissions).**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: Ethyl alcohol 200 Proof (in alcoholic beverages)

Other Classifications:

WHMIS (Canada): CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-2B:

Material causing other toxic effects (TOXIC).

DSCL (EEC): R11- Highly flammable. R45- May cause cancer.

Protective Equipment: Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

References: Not available.

**Other Special Considerations: Uses: Topical medication
for skin disorders**

The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.