T.M. THAKORE PHARMACEUTICAL LABORATORIES

MATERIAL SAFETY DATA SHEET

Preparation Date: 01/2020 **Revision date:** 01/2022

1. IDENTIFICATION

Product identification

Product Name: COAL TAR TOPICAL SOLUTION USP

Other means of identification

Synonyms: No information available
CAS #: Mixture
RTECS # Not available
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: No information available.
Uses advised against No information available

Manufacturer: **T.M.Thakore Pharmaceutical Laboratories**
15-A, Premson's Industrial Estate, Caves Road,
Jogeshwari (East), Mumbai-400060.

Web site tmtpharma.in
Emergency telephone number Tel.:09702369864

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Germ cell mutagenicity	Category 1A
Carcinogenicity	Category 1A
Reproductive toxicity	Category 1A
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 1
Flammable liquids	Category 2

Label elements

Danger

Hazard statements
Causes serious eye irritation

Causes skin irritation
May cause respiratory irritation. May cause drowsiness or dizziness
Causes damage to organs through prolonged or repeated exposure
May damage fertility or the unborn child
May cause cancer
May cause genetic defects
Highly flammable liquid and vapor

Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Not available

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling
Do not breathe mist or vapors
Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep container tightly closed
Ground container and receiving equipment Use explosion-proof equipment
Use only non-sparking tools
Take precautionary measures against static discharge Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical attention
In case of fire: Use CO2, dry chemical, or foam to extinguish.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
If skin irritation occurs: Get medical attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water Wash contaminated clothing before reuse
IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Ethyl Alcohol	64-17-5	81-86
Coal tar distillate	65996-92-1	9-11

Polysorbate 80	9005-65-6	4-6

4. FIRST AID MEASURES

First aid measures

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute anddelayed

Symptoms

Causes skin irritation
Causes serious eye irritation
May cause irritation of respiratory tract
Dyspnea (Difficulty breathing and shortness of breath) Central nervous system effects
Drowsiness
Dizziness
Headache
Ataxia
Staggering gait
Nausea
Vomiting
May cause cardiovascular effects **Indication**

of any immediate medical attention and special treatment needed Notes to Physician:

Treat symptomatically.

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO_2). Dry chemical. Water spray mist or foam. Alcohol-resistant foam.

Unsuitable Extinguishing Media: Do not use a solid (straight) water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Hazardous combustion products Carbon Monoxide, Carbon Dioxide.

Specific hazards Flammable. May be ignited by heat, sparks or flames.

Vapor may travel considerable distance to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks). Container explosion may occur under fire conditions or when heated. Fire may produce irritating, corrosive and/or toxic gases.

Special Protective Actions for Firefighters

Specific Methods: No information available

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus Pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Remove all sources of ignition. Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. Keep away from incompatible materials. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.

Safe Handling Advice
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Do not ingest. Do not smoke. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:
Oxidizing agents
Acids
Alkalis
Bases
Metals
Acid anhydrides
Acid chlorides
Alkali Metals
Hydrazine
isocyanates

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limits

Component	CAS No	**OSHA**	**NIOSH**	**ACGIH**	**AIHA WEEL**
Ethyl Alcohol	64-17-5	1000 ppm TWA 1900 mg/m³ TWA	1000 ppm TWA 1900 mg/m³ TWA	1000 ppm STEL	None
Coal tar distillate	65996-92-1	None	None	None	None
Polysorbate 80	9005-65-6	None	None	None	None

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles

Skin and body protection: Long sleeved clothing
Chemical resistant apron

Gloves

Respiratory protection: Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

Hygiene measures: Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:
Liquid

Color:
Amber coloured Solution

Odor:
Characteristic. Aromatic. Naphthalene-like.

Taste
No information available.

Formula
No information available

Molecular/Formula weight (g/mole):
No information available

Flammability (solid, gas)
Flammable

Flash point (°C):
17°C

Flashpoint (°C/°F):
17°C/ 62.6°F

Flash Point Tested according to:
Closed cup

Autoignition Temperature (°C/°F):
425°C/ 797°F

Lower Explosion Limit (%):
3.5%

Upper Explosion Limit (%):
15%

Melting point/range(°C/°F):
-114.1°C/ -173.4°F (Ethyl alcohol 200 Proof)

Decomposition temperature(°C/°F):
No information available

Boiling point/range(°C/°F): 78.5°C/ 173.3°F (Ethyl alcohol 200 Proof)

Bulk density:
No information available

Specific gravity:
0.8438

Density (g/cm3):
No information available

pH
No information available

Evaporation rate:
No information available

Vapor pressure @ 20°C (kPa):
5.7 (for Ethyl alcohol 200 proof)

Odor threshold (ppm):
100 (Ethyl alcohol)

Vapor density:
1.59 (Ethyl alcohol 200 Proof)

VOC content (g/L):
835

Partition coefficient (n-octanol/water):
No information available

Miscibility:
No information available

Viscosity:
No information available

Solubility:
Soluble in solvents

10. STABILITY AND REACTIVITY

Reactivity

For Ethyl alcohol:
When Ethanol comes in contact with Sodium, it liberates flammable hydrogen gas
Can react vigorously/explosively with oxidizers. Ethanol can react vigorously/explosively with the following: ammonium hydroxide & silver oxide, chlorine or chlorine oxides, perchlorates (barium perchlorate, chloryl perchlorate, magnesium perchlorate (forms ethyl perchlorate), nitrosyl perchlorate , potassium perchlorate, silver perchlorate, uranyl perchlorate), acetic anhydride, acetyl bromide (evolves hydrogen bromide), acetyl chloride, aluminum sesquibromide ethylate, bromine pentafluoride, calcium hypochlorite, chromic anhydride, chromium trioxide, chromyl chloride, cyanuric acid + water, dichloromethane + sulfuric acid + nitrate (or) nitrite, manganese perchlorate + 2,2-dimethoxy propane, dioxygen difluoride, disulfuryl difluoride, fluorine nitrate, hydrogen peroxide, iodine heptafluoride, manganese heptoxide, iodine + methanol + mercuric oxide, iodine + Phosphorus (forms ethane iodide), mercuric nitrate, nitric acid, perchloric acid, permanganic acid, peroxodisulfuric acid, platinum black, potassium dioxide, potassium permanganate, potassium superoxide, potassium tert-butoxide, ruthenium(VIII) oxide, silver +nitric acid (forms

silver fulminate), silver nitrate (forms ethyl nitrate), silver peroxide, sodium hydrazide, hydrogen peroxide + sulfuric acid, sulfuric acid + permanganates, uranium hexafluoride, sulfuric acid + sodium dichromate, tetrachlorisilane + water, silver & nitric acid, tetraphosphorus hexaoxide
It can react vigorously or explosively with acid hydrides or acid chlorides It
reacts with alkali metals to liberate flammable hydrogen gas
It reacts with acetyl bromide to evolve hydrogen bromide
It reacts with ammonia + silver nitrate to form silver nitride and silver fulminate Reacts
vigorously with acetyl chloride
Ethanol ignites on contact with chromyl chloride.Ethanol ignites on contact with iodine heptafluoride gas.It ignites than explodes upon contact with nitrosyl perchlorate.Additon of platinum black catalyst caused ignition

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur **Conditions to avoid:** Heat. Ignition sources. Incompatible materials.

Incompatible Materials:
Oxidizing agents
Acids
Alkalis
Bases
Metals
Acid anhydrides
Acid chlorides
Alkali Metals
Hydrazine
isocyanates

Hazardous decomposition products: Carbon oxides.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Skin. Eyes. Inhalation. Ingestion.

Acute Toxicity

Component Information

Ethyl Alcohol	
CAS No	64-17-5

LD50/oral/rat = 7060 mg/kg Oral LD50 Rat **LD50/oral/mouse =** 3450 mg/kg Oral LD50 Mouse **LD50/dermal/rabbit =** No information available **LD50/dermal/rat =** No information available **LC50/inhalation/rat =** 124.7 mg/L Inhalation LC50 Rat 4 h

LC50/inhalation/mouse = 39000 mg/m^3 4 h
Other LD50 or LC50information = >60000 ppm Inhalation LC50 Mouse 1 h 5900 mg/m^3 Inhalation LC50 Rat 6 h
20000 ppm Inhalation LC50 Rat 10 h
5560 mg/kg Oral LD50 Guinea Pig 6300 mg/kg Oral LD50 Rabbit

Coal tar distillate	
CAS No	65996-92-1

LD50/oral/rat = No information available **LD50/oral/mouse =** No information available **LD50/dermal/rabbit =** No information available **LD50/dermal/rat =** No information available **LC50/inhalation/rat =** No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50information = No information available

Polysorbate 80	
CAS No	9005-65-6

LD50/oral/rat = 34500 µL/kg Oral LD50 Rat; >38000 mg/kg
LD50/oral/mouse = 25000 mg/kg **LD50/dermal/rabbit =** No information available **LD50/dermal/rat =** No information available **LC50/inhalation/rat =** No information available **LC50/inhalation/mouse =** No information available
Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
Value - Acute Tox = No information available

LD50/oral/mouse =
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit
Value - Acute Tox = No information available

LD50/dermal/rat
VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = > 60000 ppm
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation. It is a phototoxic substance that, in presence of ultraviolet light (sunlight) can cause a skin reaction similar to an exaggerated sunburn, frequently causing blisters.

Eye Contact: Causes serious eye irritation.

Inhalation

Inhalation of mist or vapors may cause respiratory tract irritation and mucous membrane irritation. Symptoms may include coughing and shortness of breath. May cause nausea and headache. It may affect behavior/central nervoussystem (ataxia, general anesthetic, drowsiness). May affect respiration (respiratory depression). Inhalation of high concentrations of vapor may cause anesthetic effects. Inhalation of high concentrations of vapors may cause dizziness or suffocation. May affect the brain.

Ingestion

Ingestion can cause severe gastrointestinal tract irritation with abdominal tenderness, anorexia, nausea, vomiting. It may also affect behavior/central nervous system and cause weakness, central nervous system depression and may affect the liver and kidneys. Aspiration can cause lung inflammation and damage. May cause gastritis. May cause loss of appetite. May cause flushed skin. May affect the cardiovascular system (change in heart rate). May affect the cardiovascular system (hypotension or hypertension, tachycardia, dysrhythmias). It may affect behavior/central nervous system (excitation, mild euphoria, excessive talking, fatigue, headache, dizziness, drowsiness, staggaring gait, ataxia, hallucinations, slurred speech, amnesia, confusion, release of inhibitions, agressive behavior, convulsions, coma). May affect respiration (dyspnea, respiratory depression). May affect liver. May affect the blood. May affect the endocrine system. It may affect the spleen. May affect urinary system (kidneys).

Aspiration hazard

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure **Chronic Toxicity**

Skin: Prolonged or repeated exposure to coal tar distillate may cause acne, folloculitis, changes in skin pigmentation and benign skin growth may occur if good personal hygiene is not practiced.It may also cause photosensitization dermatitis (photosensitivity) in presence of ultraviolet lightEyes: Repeated or prolonged exposure may cause eye damage. Prolonged or repeated exposure may cause brown staining in the eyes.Inhalation: Prolonged or repeated inhalation may contribute to gallbladder disease, pneumonitis, and pulmonary vessel thrombosis. Medical Conditions Aggravated by Exposure: Existing skin disorders (e.g. eczema) may be aggravated by exposure to this material.Please note: Inhalation of coal tar (CAS number 8007-45-2) and coal tar pitch (CAS number 65996-93-2) aerosols has caused liver,cancer in rats and liver and lung changes in rats and hamsters. Studies using multiple species exposed to coal tar aerosols reported tumors of the skin, lung, liver, kidney and spleen. However, there is no data or information or evidence for carcinogenicity for Coal Tar distillate (CAS number 65996-92-1).

Sensitization:

No information available.

Mutagenic Effects:

May affect genetic material
Experiments with bacteria and/or yeast have shown mutagenic effects Mutagenic effects in mammalian somatic cells

Carcinogenic effects:

May cause cancer.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Ethyl Alcohol	64-17-5	Group 1 - Monograph 100E [2012] in alcoholic	A3 Confirmed Animal Carcinogen with Unknown	Not listed	Present	Not listed	Not listed

		beverages Monograph 96 [2010] in alcoholic beverages	Relevance to Humans				
Coal tar distillate	65996-92-1	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed
Polysorbate 80	9005-65-6	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists) IARC

(International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity May damage fertility or the unborn child

Reproductive Effects: For Ethyl alcohol:
Causes adverse reproductive effects

Developmental Effects: For Ethyl alcohol:
May cause harm to the unborn child
May cause adverse developmental effects

Teratogenic Effects: For Ethyl alcohol:
Causes birth defects (teratogenic effects)

Specific Target Organ Toxicity

STOT - single exposure repeated exposure Organs: STOT - single exposure. respiratory system. central nervous system. **STOT -** Causes damage to organs through prolonged or repeated exposure. **Target** Skin. Liver. Central nervous system. Nervous system. Heart. Reproductive System.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Ethyl Alcohol - 64-17-5

Fish LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: >100mg/L (96h, Pimephales promelas) LC50: 13400 - 15100mg/L (96h, Pimephales promelas)

Crustacea LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna) EC50: =10800mg/L (24h, Daphnia magna)

Persistence and degradability: No information available

Bioaccumulative potential: No information available.

Mobility in soil No information available

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethyl Alcohol	64-17-5	None	None	None	None
Coal tar distillate	65996-92-1	None	None	None	None
Polysorbate 80	9005-65-6	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No	UN1170
Proper Shipping Name	Ethanol solution
Hazard Class	3
Subsidiary Class	No information available
Packing group	II
Emergency Response Guide Number	127
Marine Pollutant	No data available
DOT RQ (lbs):	No information available
Special Provisions	24, IB2, T4, TP1
Symbol(s):	No information available
Description:	UN1170, Ethanol, 3, II

ADR

UN Number	UN1170
Proper Shipping Name:	Ethanol solution
Transport hazard class(es)	3
Packing group	II
Subsidiary Risk:	No information available
Special Provisions	144, 601
Description:	UN1170, Ethanol, 3, II

IMDG

UN-No:	UN1170
Proper Shipping Name:	Ethanol solution
Hazard Class:	3
Subsidiary Risk:	No information available
Packing Group:	II
Marine Pollutant	No information available
EMS:	F-E
Special Provisions	144
Description	UN1170, Ethanol, 3, II

RID

UN Number	UN1170
Proper Shipping Name	Ethanol solution
Transport hazard class(es)	3
Subsidiary Risk:	No information available
Packing group	II
Special Provisions	144, 601
Description:	UN1170, Ethanol, 3, II

ICAO (air)

UN-No:	UN1170
Proper Shipping Name:	Ethanol solution
Hazard Class	3
Subsidiary Risk:	No information available

Packing Group:	II
Description:	UN1170, Ethanol, 3, II
Special Provisions	A58, A180, A3
IATA	
UN Number	UN1170
Proper Shipping Name:	Ethanol solution
Transport hazard class(es)	3
Subsidiary Risk:	No information available
Packing group	II
Precautionary Statements - Response	3L
Special Provisions	No information available
Description	UN1170, Ethanol, 3, II
No. of pcs	1 drum
Gross Weight (Kg)	169 kg
Dimensions	Length 902.2mm , Width 589mm , empty weight 8.5 Kg -9.8 Kg
Volume Weight (Kg)	160 kg
Commodity	Coal Tar Topical Solution USP

15. REGULATORY INFORMATION

Component	CAS No
Ethyl Alcohol	64-17-5
Coal tar distillate	65996-92-1
Polysorbate 80	9005-65-6

16. OTHER INFORMATION

Manufactured By: - T.M. Thakore Pharmaceutical Laboratories

The MSDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

End MSDS