

Material Name: Coal Tar Distillate SDS ID: STE-007

* * *Section 1 - IDENTIFICATION* * *

Material Name: Coal Tar Distillate

Chemical Family

Aromatic hydrocarbons

Recommended Use

For use in process chemical and chemical feedstock.

Restrictions on Use

None known.

Manufacturer Information

Stella-Jones Corporation Park West One, Suite 500 1000 Cliff Mine Road

Pittsburgh, PA 15275 Phone: 412-325-0202 CHEMTREC®: 800-424-9300 (Intl. 703-527-3887)

* * *Section 2 - HAZARDS IDENTIFICATION* * *

Classification in accordance with 29 CFR 1910.1200

Flammable Liquids, Category 4

Acute Toxicity (Oral), Category 4 (10% unknown) Acute

Toxicity (Dermal), Category 4 (20% unknown) Acute

Toxicity (Inhalation), Category 4 (26% unknown) Skin

Corrosion / Irritation, Category 2

Eye Damage / Irritation, Category 2A

Sensitization - Skin, Category 1

Germ Cell Mutagenicity, Category 1B

Carcinogenicity, Category 1A

Toxic to Reproduction, Category 1B

Specific Target Organ Toxicity - Single Exposure, Category 1 (blood, cardiovascular system, central nervous system, eyes, kidneys, liver, and respiratory system)

Specific Target Organ Toxicity - Repeated Exposure, Category 1 (blood, cardiovascular system, central nervous system, ears, eyes, kidneys, liver, nervous system, and respiratory system)

Hazardous to the Aquatic Environment - Acute Hazard, Category 1

Hazardous to the Aquatic Environment - Chronic Hazard, Category 1

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER

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Hazard Statement(s)

Combustible liquid

Harmful if swallowed

Harmful in contact with skin

Harmful if inhaled

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction

May cause genetic defects

May cause cancer

May damage fertility or the unborn child

Causes damage to blood, cardiovascular system, central nervous system, eyes, kidneys, liver, and respiratory system

Causes damage to blood, cardiovascular system, central nervous system, ears, eyes, kidneys, liver, nervous system, and respiratory system through prolonged or repeated exposure

Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)

Prevention

Keep away from flames and hot surfaces. No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing vapor or mist. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment.

Response

In case of fire, use media appropriate for extinction. IF EXPOSED OR CONCERNED: Call a POISON CENTER or doctor/physician. IF SW ALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation or rash occurs, seek medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. 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 advice/attention. Collect spillage.

Storage

Store in a well-ventilated place. Keep cool. Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) Not Otherwise Classified

No additional information is available.

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

| CAS | Component | Percent |
|------------|---------------------|---------|
| 65996-92-1 | Coal tar distillate | 100 |
| 91-20-3 | Naphthalene | 20-75 |
| 85-01-8 | Phenanthrene | 5-10 |
| 1319-77-3 | Cresol, all isomers | 5-10 |
| 92-52-4 | Biphenyl | 2-5 |

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| 83-32-9 | Acenaphthene | 2-5 |
|-----------|------------------------------|---------|
| 120-12-7 | Anthracene | 2-5 |
| 1321-94-4 | Methylnaphthalene | 1-5 |
| 1330-20-7 | Xylenes (o-, m-, p- isomers) | 0.5-1 |
| 95-63-6 | Benzene, 1,2,4-trimethyl- | 0.1-1 |
| 100-42-5 | Styrene | 0.1-1 |
| 71-43-2 | Benzene | 0.1-1 |
| 100-41-4 | Ethylbenzene | 0.1-1 |
| 108-95-2 | Phenol | 0.2-0.5 |
| 50-32-8 | Benzo[a]pyrene | 0.1 |
| 53-70-3 | Dibenzo(a,h)anthracene | 0.1 |

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Phenolic compounds, Aromatic hydrocarbons, polycyclic (130498-29-2), Phenols, Aromatic compounds, Alkylbenzenes, Alkyl(C3-C4)benzenes (all isomers).

* * *Section 4 - FIRST AID MEASURES* * *

Description of Necessary Measures

Inhalation

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Skin

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice. If skin irritation or rash occurs; Get medical advice/attention.

Eyes

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. If eye irritation persists: Get medical advice/attention.

Ingestion

Call a poison control center or doctor immediately for treatment advice. Rinse mouth. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most Important Symptoms/Effects

Acute

Harmful if swallowed, in contact with skin or if inhaled, skin irritation, eye irritation, allergic reactions, blood damage, cardiovascular system damage, central nervous system damage, eye damage, kidney damage, liver damage, respiratory system damage

Delayed

Allergic reactions, blood damage, cardiovascular system damage, central nervous system damage, ears, eye damage, kidney damage, liver damage, nervous system damage, respiratory system damage, heritable genetic damage, cancer, reproductive effects

Indication of Immediate Medical Attention and Special Treatment

Probable mucosal damage may contraindicate the use of gastric lavage. Vomiting may cause aspiration pneumonia.

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| | | | | |

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* * *Section 5 - FIRE FIGHTING MEASURES* * *

Suitable Extinguishing Media

Use carbon dioxide, regular dry chemical, regular foam or water.

Unsuitable Extinguishing Media

Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical

Moderate fire hazard. Closed containers may rupture violently when heated. Contact with heat may generate toxic and/or flammable gases.

Hazardous Combustion Products

Combustion: oxides of carbon

Fire Fighting Measures

Stop leak if possible without personal risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Water may be used to blanket fire. Directly spraying water or foam onto hot burning product may cause frothing. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire.

Special Protective Equipment and Precautions for Firefighters

Wear full protective fire-fighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

* * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up

In case of spillage, stop the flow of material and block any potential routes to water systems. Absorb (with sand, earth, etc.) discharged material and dispose of in accordance with applicable Federal, State and local regulations. If spill is large, be prepared to isolate the hazard area. Deny access to the spill area to persons who are not involved in the cleanup and/or who have not been properly trained in spill management of hazardous liquids. This product is toxic to aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollution Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65).

* * *Section 7 - HANDLING AND STORAGE* * *

Precautions for Safe Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing vapors or fumes. Avoid prolonged or repeated contact with skin or eyes. Wear appropriate protective equipment when performing maintenance on contaminated equipment. Observe good hygiene and safety practices when handling this product. Keep away from heat, sparks and flame. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Conditions for Safe Storage, including any Incompatibilities

Do not store in open, unlabeled or mislabled containers. Protect from physical damage. Keep container closed when not in use. Keep separated from incompatible substances.

Incompatibilities Avoid oxidizing materials.

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* * *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

Component Exposure Limits

Naphthalene (91-20-3)

ACGIH: 10 ppm TWA

Skin - potential significant contribution to overall exposure by the cutaneous route

NIOSH: 10 ppm TWA; 50 mg/m3 TWA

15 ppm STEL; 75 mg/m3 STEL

250 ppm IDLH

OSHA (US): 10 ppm TWA; 50 mg/m3 TWA
OSHA (vacated): 10 ppm TWA; 50 mg/m3 TWA

15 ppm STEL; 75 mg/m3 STEL

Mexico: 10 ppm TWA LMPE-PPT; 50 mg/m3 TWA LMPE-PPT

15 ppm STEL [LMPE-CT]; 75 mg/m3 STEL [LMPE-CT]

Phenanthrene (85-01-8)

OSHA (US): 0.2 mg/m3 TWA

Cresol, all isomers (1319-77-3)

ACGIH: 20 mg/m3 TWA (inhalable fraction and vapor)

Skin - potential significant contribution to overall exposure by the cutaneous route

OSHA (US): 5 ppm TWA; 22 mg/m3 TWA

prevent or reduce skin absorption (all isomers)

OSHA (vacated): 5 ppm TWA; 22 mg/m3 TWA

Prevent or reduce skin absorption

Mexico: 5 ppm TWA LMPE-PPT; 22 mg/m3 TWA LMPE-PPT

Skin - potential for cutaneous absorption

Biphenyl (92-52-4)

ACGIH: 0.2 ppm TWA

NIOSH: 0.2 ppm TWA; 1 mg/m3 TWA

100 mg/m3 IDLH

OSHA (US): 0.2 ppm TWA; 1 mg/m3 TWA
OSHA (vacated): 0.2 ppm TWA; 1 mg/m3 TWA

Mexico: 0.2 ppm TWA LMPE-PPT; 1.5 mg/m3 TWA LMPE-PPT

0.6 ppm STEL [LMPE-CT]; 4 mg/m3 STEL [LMPE-CT]

Anthracene (120-12-7)

OSHA (US): 0.2 mg/m3 TWA

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: 100 ppm TWA

150 ppm STEL

OSHA (US): 100 ppm TWA; 435 mg/m3 TWA OSHA (vacated): 100 ppm TWA; 435 mg/m3 TWA

150 ppm STEL; 655 mg/m3 STEL

Mexico: 100 ppm TWA LMPE-PPT; 435 mg/m3 TWA LMPE-PPT

150 ppm STEL [LMPE-CT]; 655 mg/m3 STEL [LMPE-CT]

Benzene, 1,2,4-trimethyl- (95-63-6)

NIOSH: 25 ppm TWA; 125 mg/m3 TWA

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Styrene (100-42-5)

ACGIH: 20 ppm TWA

40 ppm STEL

NIOSH: 50 ppm TWA; 215 mg/m3 TWA

100 ppm STEL; 425 mg/m3 STEL

700 ppm IDLH

OSHA (US): 100 ppm TWA

200 ppm Ceiling

600 ppm Peak (5 minutes in any 3 hours)

OSHA (vacated): 50 ppm TWA; 215 mg/m3 TWA

100 ppm STEL; 425 mg/m3 STEL

Mexico: 50 ppm TWA LMPE-PPT; 215 mg/m3 TWA LMPE-PPT

100 ppm STEL [LMPE-CT]; 425 mg/m3 STEL [LMPE-CT]

Skin - potential for cutaneous absorption

Benzene (71-43-2)

ACGIH: 0.5 ppm TWA

2.5 ppm STEL

Skin - potential significant contribution to overall exposure by the cutaneous route

NIOSH: 0.1 ppm TWA

1 ppm STEL

500 ppm IDLH

OSHA (US): 5 ppm STEL (See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA

10 ppm TWA (applies to industry segments exempt from the benzene standard at 29

CFR 1910.1028); 1 ppm TWA

5 ppm STEL (see 29 CFR 1910.1028)

25 ppm Ceiling

50 ppm Peak (10 minutes)

see 29 CFR 1910.1028

OSHA (vacated): 25 ppm Ceiling (unless specified in 1910.1028)

10 ppm TWA (unless specified in 1910.1028)

50 ppm STEL (unless specified in 1910.1028, 10 min)

Mexico: 1 ppm TWA LMPE-PPT; 3.2 mg/m3 TWA LMPE-PPT

5 ppm STEL [LMPE-CT]; 16 mg/m3 STEL [LMPE-CT]

Ethylbenzene (100-41-4)

ACGIH: 20 ppm TWA

NIOSH: 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

800 ppm IDLH (10% LEL)

OSHA (US): 100 ppm TWA; 435 mg/m3 TWA

OSHA (vacated): 100 ppm TWA; 435 mg/m3 TWA

125 ppm STEL; 545 mg/m3 STEL

Mexico: 100 ppm TWA LMPE-PPT; 435 mg/m3 TWA LMPE-PPT

125 ppm STEL [LMPE-CT]; 545 mg/m3 STEL [LMPE-CT]

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Phenol (108-95-2)

ACGIH: 5 ppm TWA

Skin - potential significant contribution to overall exposure by the cutaneous route

NIOSH: 5 ppm TWA; 19 mg/m3 TWA

15.6 ppm Ceiling (15 min); 60 mg/m3 Ceiling (15 min)

Potential for dermal absorption

250 ppm IDLH

OSHA (US): 5 ppm TWA; 19 mg/m3 TWA

prevent or reduce skin absorption

OSHA (vacated): 5 ppm TWA; 19 mg/m3 TWA

Prevent or reduce skin absorption

Mexico: 5 ppm TWA LMPE-PPT; 19 mg/m3 TWA LMPE-PPT

10 ppm STEL [LMPE-CT]; 38 mg/m3 STEL [LMPE-CT]

Skin - potential for cutaneous absorption

Benzo[a]pyrene (50-32-8)

OSHA (US): 0.2 mg/m3 TWA

Appropriate Engineering Controls

Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eyes/Face Protection

Wear chemical safety goggles with a faceshield or chemical splash hood. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection

Wear appropriate chemical resistant clothing. To reduce sun sensitivity, a sun-blocking lotion (SPF15+) can also be applied. Wear washable or disposable coveralls or long-sleeved shirt and long pants. Wear socks plus industrial grade safety boots with chemical resistant soles.

Glove Recommendations

Wear appropriate chemical resistant gloves.

Respiratory Protection

If the applicable TLVs and/or PELs are exceeded, use canister or cartridge respirators, which are MSHA/NIOSH-approved, with organic vapor cartridges.

* * *Section 9 - PHYSICAL AND CHEMICAL PROPERTIES* * *

| Physical State: | Liquid | Appearance: | brown to black liquid |
|-------------------------------|----------------|------------------------|-----------------------|
| Color: | brown to black | Physical Form: | liquid |
| Odor: | aromatic odor | Odor Threshold: | Not available |
| pH: | Not available | Melting Point: | Not available |
| Boiling Point: | >150 °C | Decomposition: | Not available |
| Flash Point: | <80 °C | Evaporation Rate: | Not available |
| OSHA Flammability Class: | IIIB | LEL: | Not available |
| UEL: | Not available | Vapor Pressure: | 1 mmHg @ 30 °C |
| Vapor Density (air = 1): | Not available | Density: | 8.76 lb/gal |
| Specific Gravity (water = 1): | 1.05 @ 20 °C | Water Solubility: | Negligible |
| Log KOW: | Not available | Coeff. Water/Oil Dist: | Not available |
| Auto Ignition: | Not available | Viscosity: | Not available |
| Volatility: | Not available | | |

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Other Property Information

* * *Section 10 - STABILITY AND REACTIVITY* * *

Reactivity

No reactivity hazard is expected.

Chemical Stability

Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions

Will not polymerize.

Conditions to Avoid

Avoid heat, flames, sparks and other sources of ignition.

Incompatible Materials

Avoid oxidizing materials.

Hazardous Decomposition

Combustion: oxides of carbon

* * *Section 11 - TOXICOLOGICAL INFORMATION* * *

Acute and Chronic Toxicity

May cause irritation to respiratory tract, skin, and eyes; May cause central nervous system effects and sensitivity to sunlight.; Prolonged and repeated skin exposure over many years in the absence of recommended hygiene practices may lead to changes in skin pigmentation, benign skin growth and in some cases result in skin cancer.

Component Analysis - LD50/LC50

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

Naphthalene (91-20-3)

Dermal LD50 Rabbit 1120 mg/kg; Inhalation LC50 Rat >340 mg/m3 1 h; Oral LD50 Rat 1110 mg/kg

Phenanthrene (85-01-8)

Oral LD50 Mouse 700 mg/kg

Cresol, all isomers (1319-77-3)

Dermal LD50 Rabbit 2000 mg/kg; Oral LD50 Rat 1454 mg/kg

Biphenyl (92-52-4)

Oral LD50 Rat 2140 mg/kg; Inhalation LC50 Mouse >0.275 mg/L 4 h

Acenaphthene (83-32-9)

Oral LD50 Rat 10000 mg/kg

Anthracene (120-12-7)

Dermal LD50 Rat >1320 mg/kg; Oral LD50 Rat >16000 mg/kg

Methylnaphthalene (1321-94-4)

Dermal LD50 Rat >2500 mg/kg; Oral LD50 Rat 1110 mg/kg

Xylenes (o-, m-, p- isomers) (1330-20-7)

Dermal LD50 Rabbit >4350 mg/kg; Inhalation LC50 Rat 29.08 mg/L 4 h (vapor); Oral LD50 Rat 3500 mg/kg

Benzene, 1,2,4-trimethyl- (95-63-6)

Dermal LD50 Rabbit >3160 mg/kg; Inhalation LC50 Rat 18 g/m3 4 h; Oral LD50 Rat 3280 mg/kg

Styrene (100-42-5)

Inhalation LC50 Rat 11.7 mg/L 4 h (vapor); Oral LD50 Rat 1000 mg/kg

Benzene (71-43-2)

Dermal LD50 Rabbit >8200 mg/kg; Inhalation LC50 Rat 44.66 mg/L 4 h (vapor); Oral LD50 Rat 810 mg/kg

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Ethylbenzene (100-41-4)

Dermal LD50 Rabbit 15400 mg/kg; Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg

Phenol (108-95-2)

Dermal LD50 Rabbit 630 mg/kg; Oral LD50 Rat 340 mg/kg

Information on Likely Routes of Exposure

Inhalation

irritation, difficulty breathing, central nervous system effects, headache, drowsiness, dizziness, loss of coordination

Ingestion

irritation, nausea, vomiting, stomach pain, headache, drowsiness, dizziness, loss of coordination, coma, cancer

Skin Contact

irritation (possibly severe), sensitivity to sunlight, cancer

Eye Contact

irritation (possibly severe), sensitivity to light

Immediate Effects

irritation, allergic skin reactions, blood damage, cardiovascular system damage, central nervous system damage, eye damage, kidney damage, liver damage, respiratory system damage

Delayed Effects

blood damage, cardiovascular system damage, central nervous system damage, ears, eye damage, kidney damage, liver damage, nervous system damage, respiratory system damage

Medical Conditions Aggravated by Exposure

Medical conditions may include respiratory disorders and skin disorders.

Irritation/Corrosivity Data

respiratory tract irritation, skin irritation, eye irritation

Respiratory Sensitization

No information available for the product.

Dermal Sensitization

May cause an allergic skin reaction.

Carcinogenicity

Component Carcinogenicity

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Naphthalene (91-20-3)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans IARC: Monograph 82 [2002] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Phenanthrene (85-01-8)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 3 (not classifiable))
 NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Cresol, all isomers (1319-77-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

Acenaphthene (83-32-9)

IARC: Monograph 92 [2010] (Group 3 (not classifiable))

NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Anthracene (120-12-7)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (Group 3 (not classifiable))
 NTP: Reasonably Anticipated To Be A Human Carcinogen (related to Aromatic hydrocarbons, polycyclic)

Xylenes (o-, m-, p- isomers) (1330-20-7)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Styrene (100-42-5)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 82 [2002]; Monograph 60 [1994] (Group 2B (possibly carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Benzene (71-43-2)

ACGIH: A1 - Confirmed Human Carcinogen

IARC: Monograph 100F [2012]; Supplement 7 [1987]; Monograph 29 [1982] (Group 1 (carcinogenic to

humans))

NTP: Known Human Carcinogen OSHA: see 29 CFR 1910.1028

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Ethylbenzene (100-41-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

Phenol (108-95-2)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Benzo[a]pyrene (50-32-8)

ACGIH: A2 - Suspected Human Carcinogen

IARC: Monograph 100F [2012]; Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983]

(overall evaluation upgraded from Group 2B to Group 1 based on mechanistic and other relevant

data) (Group 1 (carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Dibenzo(a,h)anthracene (53-70-3)

IARC: Monograph 92 [2010]; Supplement 7 [1987]; Monograph 32 [1983] (overall evaluation upgraded

from 2B to 2A with supporting evidence from other relevant data) (Group 2A (probably

carcinogenic to humans))

NTP: Reasonably Anticipated To Be A Human Carcinogen

Mutagenic Data

May damage fertility or the unborn child

Reproductive Effects Data

May cause reproductive effects.

Specific Target Organ Toxicity - Single Exposure

blood, cardiovascular system, central nervous system, eyes, kidneys, liver, respiratory system

Specific Target Organ Toxicity - Repeated Exposure

blood, cardiovascular system, central nervous system, ears, eyes, kidneys, liver, nervous system, respiratory system

Aspiration Hazard

No information is available.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component Analysis - Aquatic Toxicity

Naphthalene (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 promelas: 1.99 mg/L [static]; 96 Hr LC50

Lepomis macrochirus: 31.0265 mg/L [static]

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]

Cresol, all isomers (1319-77-3)

Fish: 96 Hr LC50 Pimephales promelas: 12.8 mg/L [flow-through]; 96 Hr LC50 Lepomis

macrochirus: 10 mg/L [static]

Biphenyl (92-52-4)

Fish: 96 Hr LC50 Pimephales promelas: 1.65 - 2.29 mg/L [flow-through]; 96 Hr LC50

Pimephales promelas: 1.17 - 1.81 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 4.3 -

5.1 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 1.4 - 1.6 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 0.63 - 0.85 mg/L [Static] (<24 hours old)

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Acenaphthene (83-32-9)

Fish: 96 Hr LC50 Pimephales promelas: 0.509 mg/L [flow-through]; 96 Hr LC50

Oncorhynchus mykiss: 0.6 - 0.75 mg/L [flow-through]; 96 Hr LC50 Lepomis

macrochirus: 1.3 - 2.1 mg/L [static]

Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 0.23 - 1.15 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: 41 mg/L; 48 Hr EC50 Daphnia magna: 3.45 mg/L; 48 Hr

EC50 Daphnia magna: 1.102 - 1.475 mg/L [Static]

Anthracene (120-12-7)

Fish: 96 Hr LC50 Lepomis macrochirus: 0 - 0.00318 mg/L [flow-through]; 96 Hr LC50

Lepomis macrochirus: 0.00278 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 0.081 - 0.112 mg/L

Xylenes (o-, m-, p- isomers) (1330-20-7)

Fish: 96 Hr LC50 Pimephales promelas: 13.4 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus

mykiss: 2.661 - 4.093 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 13.5 - 17.3 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.1 - 16.5 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 19 mg/L; 96 Hr LC50 Lepomis macrochirus: 7.711 - 9.591 mg/L [static]; 96 Hr LC50 Pimephales promelas: 23.53 - 29.97 mg/L [static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L [semi-static]; 96 Hr LC50 Cyprinus carpio: >780 mg/L; 96 Hr

LC50 Poecilia reticulata: 30.26 - 40.75 mg/L [static]

Invertebrate: 48 Hr EC50 water flea: 3.82 mg/L; 48 Hr LC50 Gammarus lacustris: 0.6 mg/L

Benzene, 1,2,4-trimethyl- (95-63-6)

Fish: 96 Hr LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through]

Invertebrate: 48 Hr EC50 Daphnia magna: 6.14 mg/L

Styrene (100-42-5)

Fish: 96 Hr LC50 Pimephales promelas: 3.24 - 4.99 mg/L [flow-through]; 96 Hr LC50

Lepomis macrochirus: 19.03 - 33.53 mg/L [static]; 96 Hr LC50 Pimephales promelas: 6.75 - 14.5 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 58.75 - 95.32 mg/L [static]

Algae: 72 Hr EC50 Pseudokirchneriella subcapitata: 1.4 mg/L; 96 Hr EC50

Pseudokirchneriella subcapitata: 0.72 mg/L; 72 Hr EC50 Pseudokirchneriella

subcapitata: 0.46 - 4.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 0.15

- 3.2 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 3.3 - 7.4 mg/L

Benzene (71-43-2)

Fish: 96 Hr LC50 Pimephales promelas: 10.7 - 14.7 mg/L [flow-through]; 96 Hr LC50

Oncorhynchus mykiss: 5.3 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 22.49 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 28.6 mg/L [static]; 96 Hr LC50 Pimephales promelas: 22330 - 41160 µg/L [static]; 96 Hr LC50 Lepomis macrochirus:

70000 - 142000 µg/L [static]

Algae: 72 Hr EC50 Pseudokirchneriella subcapitata: 29 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: 8.76 - 15.6 mg/L [Static]; 48 Hr EC50 Daphnia magna: 10

mg/L

Ethylbenzene (100-41-4)

Fish: 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus

mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]

Algae: 72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50

Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella

subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 -

7.6 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L

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Material Name: Coal Tar Distillate SDS ID: STE-007

Phenol (108-95-2)

Fish: 96 Hr LC50 Pimephales promelas: 11.9 - 50.5 mg/L [flow-through]; 96 Hr LC50

Pimephales promelas: 20.5 - 25.6 mg/L [static]; 96 Hr LC50 Pimephales promelas: 32 mg/L; 96 Hr LC50 Oncorhynchus mykiss: 5.449 - 6.789 mg/L [flow-through]; 96 Hr LC50 Oncorhynchus mykiss: 7.5 - 14 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.23 - 7.49 mg/L [semi-static]; 96 Hr LC50 Oncorhynchus mykiss: 5.0 - 12.0 mg/L; 96 Hr LC50 Lepomis macrochirus: 13.5 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 11.9 - 25.3 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 11.5 mg/L [semi-static]; 96 Hr LC50 Poecilia reticulata: 34.09 - 47.64 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 31 mg/L [semi-static]; 96 Hr LC50 Brachydanio rerio: 27.8 mg/L; 96 Hr LC50 Cyprinus carpio: 0.00175 mg/L [semi-static]; 96 Hr LC50 Oryzias latipes: 33.9 - 43.3

mg/L [flow-through]; 96 Hr LC50 Oryzias latipes: 23.4 - 36.6 mg/L [static]

Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 46.42 mg/L; 96 Hr EC50

Pseudokirchneriella subcapitata: 0.0188 - 0.1044 mg/L [static]; 72 Hr EC50

Desmodesmus subspicatus: 187 - 279 mg/L [static]

Invertebrate: 48 Hr EC50 Daphnia magna: 4.24 - 10.7 mg/L [Static]; 48 Hr EC50 Daphnia magna:

10.2 - 15.5 mg/L

Persistence and Degradability

No information available for the product.

Bioaccumulative Potential

No information available for the product.

Mobility

No information available for the product.

* * *Section 13 - DISPOSAL CONSIDERATIONS* * *

Disposal Methods

Absorb (with sand, earth, etc.) discharged material and dispose of in accordance with applicable Federal, State and local regulations.

Waste Numbers

Cresol, all isomers (1319-77-3)

RCRA: 200.0 mg/L regulatory level (total Cresol concentration)

Benzene (71-43-2)

RCRA: 0.5 mg/L regulatory level

* * *Section 14 - TRANSPORT INFORMATION* * *

US DOT Information

Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (Contains: Coal tar distillate,

Naphthalene), RQ

UN/NA #: UN3082 Hazard Class: 9 Packing Group: III

Required Label(s): 9

US DOT Reportable Quantities

Naphthalene (91-20-3)

100 lbs RQ; 45.4 kg RQ **Phenanthrene (85-01-8)** 5000 lbs RQ; 2270 kg RQ

Cresol, all isomers (1319-77-3)

100 lbs RQ; 45.4 kg RQ

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Biphenyl (92-52-4)

100 lbs RQ; 45.4 kg RQ

Acenaphthene (83-32-9)

100 lbs RQ; 45.4 kg RQ

Anthracene (120-12-7)

5000 lbs RQ; 2270 kg RQ

Xylenes (o-, m-, p- isomers) (1330-20-7)

100 lbs RQ; 45.4 kg RQ

Styrene (100-42-5)

1000 lbs RQ; 454 kg RQ

Benzene (71-43-2)

10 lbs RQ; 4.54 kg RQ

Ethylbenzene (100-41-4)

1000 lbs RQ; 454 kg RQ

Phenol (108-95-2)

1000 lbs RQ; 454 kg RQ

Benzo[a]pyrene (50-32-8)

1 lbs RQ; 0.454 kg RQ

Dibenzo(a,h)anthracene (53-70-3)

1 lbs RQ; 0.454 kg RQ

TDG Information

Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains: Coal tar distillate, Naphthalene)

UN #: UN3082 Hazard Class: 9 Packing Group: III

Required Label(s): 9

Component Marine Pollutants (IMDG)

This material contains one or more of the following chemicals required by IMDG to be identified as marine pollutants.

Naphthalene (91-20-3)

IMDG regulated marine pollutant (UN1334); IMDG regulated marine pollutant (UN2304)

Biphenyl (92-52-4)

IMDG regulated marine pollutant (Listed in the index)

* * *Section 15 - REGULATORY INFORMATION* * *

Component Analysis

U.S. Federal Regulations

This material contains one or more of the following chemicals required to be identified under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), and/or require an OSHA process safety plan.

Coal tar distillate (65996-92-1)

TSCA 12b: Section 4, 1 % de minimus concentration

Naphthalene (91-20-3)

SARA 313: 0.1 % de minimis concentration CERCLA: 100 lb final RQ; 45.4 kg final RQ

Phenanthrene (85-01-8)

SARA 313: 1.0 % de minimis concentration CERCLA: 5000 lb final RQ; 2270 kg final RQ

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Material Name: Coal Tar Distillate SDS ID: STE-007

Cresol, all isomers (1319-77-3)

SARA 313: 1.0 % de minimis concentration CERCLA: 100 lb final RQ; 45.4 kg final RQ

Biphenyl (92-52-4)

SARA 313: 1.0 % de minimis concentration CERCLA: 100 lb final RQ; 45.4 kg final RQ

Acenaphthene (83-32-9)

CERCLA: 100 lb final RQ; 45.4 kg final RQ

Anthracene (120-12-7)

SARA 313: 1.0 % de minimis concentration CERCLA: 5000 lb final RQ; 2270 kg final RQ

Xylenes (o-, m-, p- isomers) (1330-20-7)

SARA 313: 1.0 % de minimis concentration CERCLA: 100 lb final RQ; 45.4 kg final RQ

Benzene, 1,2,4-trimethyl- (95-63-6)

SARA 313: 1.0 % de minimis concentration

Styrene (100-42-5)

SARA 313: 0.1 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Benzene (71-43-2)

SARA 313: 0.1 % de minimis concentration

CERCLA: 10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an

August 14, 1989 final rule); 4.54 kg final RQ (received an adjusted RQ of 10 lbs based on

potential carcinogenicity in an August 14, 1989 final rule)

Ethylbenzene (100-41-4)

SARA 313: 0.1 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Phenol (108-95-2)

SARA 302: 500 lb lower TPQ; 10000 lb upper TPQ

SARA 304: 1000 lb EPCRA RQ

SARA 313: 1.0 % de minimis concentration CERCLA: 1000 lb final RQ; 454 kg final RQ

Benzo[a]pyrene (50-32-8)

SARA 313: 0.1 % Supplier notification limit CERCLA: 1 lb final RQ; 0.454 kg final RQ

Dibenzo(a,h)anthracene (53-70-3)

SARA 313: 0.1 % Supplier notification limit CERCLA: 1 lb final RQ; 0.454 kg final RQ

FIFRA Information

Component Analysis

Xylenes (o-, m-, p- isomers) (1330-20-7)

Section number 180.910; Section number 180.920; Section number 180.930; Section number 180.1025

Phenol (108-95-2)

Section number 180.920; Section number 180.930

SARA 311/312 Hazardous Categories

Acute Health: Yes Chronic Health: Yes Fire: Yes Pressure: No Reactive: No

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Material Name: Coal Tar Distillate SDS ID: STE-007

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

| Component | CAS | CA | MA | MN | NJ | PA |
|---|-----------|-----|-----|------------------|-----|-----|
| Naphthalene | 91-20-3 | Yes | Yes | Yes | Yes | Yes |
| Phenanthrene (¹related to: Aromatic hydrocarbons, polycyclic) | 85-01-8 | Yes | Yes | Yes1 | Yes | Yes |
| Cresol, all isomers | 1319-77-3 | Yes | Yes | Yes | Yes | Yes |
| Biphenyl | 92-52-4 | Yes | Yes | Yes | Yes | Yes |
| Acenaphthene (¹related to: Aromatic hydrocarbons, polycyclic) | 83-32-9 | Yes | Yes | Yes ¹ | Yes | Yes |
| Anthracene (¹related to: Aromatic hydrocarbons, polycyclic) | 120-12-7 | Yes | Yes | Yes ¹ | Yes | Yes |
| Xylenes (o-, m-, p- isomers) | 1330-20-7 | Yes | Yes | Yes | Yes | Yes |
| Benzene, 1,2,4-trimethyl- | 95-63-6 | No | Yes | Yes | Yes | Yes |
| Styrene | 100-42-5 | Yes | Yes | Yes | Yes | Yes |
| Benzene | 71-43-2 | Yes | Yes | Yes | Yes | Yes |
| Ethylbenzene | 100-41-4 | Yes | Yes | Yes | Yes | Yes |
| Phenol | 108-95-2 | Yes | Yes | Yes | Yes | Yes |
| Benzo[a]pyrene | 50-32-8 | Yes | Yes | Yes | Yes | Yes |
| Dibenzo(a,h)anthracene | 53-70-3 | Yes | Yes | Yes | Yes | Yes |

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

Canada

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. WHMIS CLASSIFICATION: D2A D2B.

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL.

Naphthalene (91-20-3)
1 %
Phenanthrene (85-01-8)
1 %
Cresol, all isomers (1319-77-3)
1 %
Biphenyl (92-52-4)
1 %
Acenaphthene (83-32-9)
1 %
Anthracene (120-12-7)
1 %
Methylnaphthalene (1321-94-4)
1 %
Benzene, 1,2,4-trimethyl- (95-63-6)
0.1 %

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Material Name: Coal Tar Distillate SDS ID: STE-007

Styrene (100-42-5)

0.1 %

Benzene (71-43-2)

0.1 %

Ethylbenzene (100-41-4)

0.1 %

Benzo[a]pyrene (50-32-8)

0.1 %

Dibenzo(a,h)anthracene (53-70-3)

0.1 %

Component Analysis - Inventory

| Component | CAS | US | CA |
|------------------------------|------------|-----|-----|
| Coal tar distillate | 65996-92-1 | Yes | NSL |
| Naphthalene | 91-20-3 | Yes | DSL |
| Phenanthrene | 85-01-8 | Yes | DSL |
| Cresol, all isomers | 1319-77-3 | Yes | DSL |
| Biphenyl | 92-52-4 | Yes | DSL |
| Acenaphthene | 83-32-9 | Yes | DSL |
| Anthracene | 120-12-7 | Yes | DSL |
| Methylnaphthalene | 1321-94-4 | Yes | DSL |
| Xylenes (o-, m-, p- isomers) | 1330-20-7 | Yes | DSL |
| Benzene, 1,2,4-trimethyl- | 95-63-6 | Yes | DSL |
| Styrene | 100-42-5 | Yes | DSL |
| Benzene | 71-43-2 | Yes | DSL |
| Ethylbenzene | 100-41-4 | Yes | DSL |
| Phenol | 108-95-2 | Yes | DSL |
| Benzo[a]pyrene | 50-32-8 | Yes | DSL |
| Dibenzo(a,h)anthracene | 53-70-3 | Yes | NSL |

* * *Section 16 - OTHER INFORMATION* * *

NFPA Ratings: Health: 2 Fire: 2 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CPR - Controlled Products Regulations; DSL - Domestic Substances List; EPA - Environmental Protection Agency; F - Fahrenheit; IARC - International Agency for Research on Cancer; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; RCRA - Resource Conservation and Recovery Act; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

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Material Name: Coal Tar Distillate SDS ID: STE-007

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. Read the Safety Data Sheet before handling product.

SDS History

14 May 2015 - Update to Multiple Section(s) - OSHA GHS format update.

End of Sheet STE-007

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