COAL TAR DISTILLATES

Safety Data Sheet

According To Federal Register / Vol. 89, No. 98 / Monday, March 20, 2024 / Rules and Regulations and the OSHA Hazard Communication Standard 29 CFR 1910.1200

Date of Issue: 05/18/2026 **Version:** 3.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Substance

Product Name: COAL TAR DISTILLATES

CAS-No.: 65996-92-1

Synonyms: Light Oil, Heavy Oil

1.2. Intended Use of the Product

Use of the Substance/Mixture: Chemical feedstock

1.3. Name, Address, and Telephone of the Responsible Party

Lone Star Specialty Products, LLC
6412 U.S. Highway 259 South
Lone Star, Texas USA 75668
Phone: (903)656-2536
Fax: (903)656-2151

1.4. Emergency Telephone Number

Emergency Number:

For Chemical Emergency Call CHEMTREC day or night
Within USA and Canada: 1.800.424.9300
Mexico: 1.800.681.9531
Outside USA and Canada: 1.703.527.3887 (collect calls accepted)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Flam. Liq. 4	H227
Skin Irrit. 2	H315
Skin Sens. 1B	H317
Muta. 1B	H340
Carc. 1B	H350
Repr. 2	H361
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Full text of hazard classes and H-statements: see section 16

2.2. Label Elements GHS-US

Labeling

Hazard Pictograms (GHS-US):

GHS02 GHS07 GHS08 GHS09

Signal Word (GHS-US): Danger

Hazard Statements (GHS-US):
H227 – Combustible liquid
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H340 - May cause genetic defects.
H350 - May cause cancer.
H361 - Suspected of damaging fertility or the unborn child.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US):
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 – Keep away from heat, hot surface, sparks, open flames and other ignition sources. No smoking.
P261 - Avoid breathing vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P302+P352 - If on skin: Wash with plenty of water.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P321 - Specific treatment (see section 4 on this SDS).
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 – In case of fire: Use ABC fire extinguisher to extinguish
P391 – Collect spillage.
P403+P235 – Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Name: COAL TAR DISTILLATES

CAS-No.: 65996-92-1

Name	Synonyms	Product Identifier	%	GHS US classification
Distillates, coal tar	Coal tar distillate / Coal tar distillates / Coal tar distillates, flammable / Distillates (coal tar) / Distillates coal tar / Distillates (coal tar) - heavy anthracene oil	(CAS-No.) 65996-92-1	100	Skin Irrit. 2, H315 Skin Sens. 1, H317 Muta. 1B, H340 Carc. 1B, H350 Repr. 2, H361 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Contains	Synonyms	Product Identifier	%	GHS US classification
Naphthalene	Naphthalene, molten / Naphthalene, crude / Naphthalenes / Moth balls	(CAS-No.) 91-20-3	16.0 – 30.7	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust
Benzene	Benzol / Cyclohexatriene / benzole / Pyrobenzole / Benzine / Benzen / Coal naphtha / Pyrobenzol / Mineral naphtha / Phene / Phenyl hydride / Fenzen	(CAS-No.) 71-43-2	1.9 – 5.7	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Aquatic Chronic 3, H412
Toluene	Methylbenzene / toluol / Phenylmethane / methacide / methylbenzol / Toluolo / 1-Methylbenzene	(CAS-No.) 108-88-3	2.6 – 3.5	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Repr. 2, H361 STOT RE 2, H373 Aquatic Chronic 3, H412
Ethylbenzene	Phenylethane / Ethylbenzol / Aethylbenzol / Ethylenzene / Etilbenzene / Etylobenzen / 1-ethylbenzene	(CAS-No.) 100-41-4	0.5 – 0.8	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Acute Tox. 4, H332 STOT RE 2, H373
p-Xylene	1,4-Dimethylbenzene / Para-Xylene / 1,4-Xylene / p-Methyltoluene / p-Dimethylbenzene / p-Xylol / 4-Xylene / 4-Methyltoluene / Chromar / Scintillar / 1,4-Dimethylbenzol / paraxylene	(CAS-No.) 106-42-3	1.2 – 2.3	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 3, H412

m-Xylene	1,3-Dimethylbenzene / 1,3-Xylene / meta-Xylene / m-Xylol / m-Dimethylbenzene / m-Methyltoluene / 3-Xylene / 1,3-Dimethylbenzol / Santosol 150 / m-Xylenes / 2,4--Xylene	(CAS-No.) 108-38-3	1.2 – 2.3	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 Skin Irrit. 2, H312 Eye Dam. 1, H315 Eye Irrit. 2, H318 Acute Tox. 4, H319 STOT SE 3, H332 / H335
o-Xylene	1,2-Dimethylbenzene / 1,2-Xylene / Ortho-Xylene / o-Xylol / o-Methyltoluene / 2-Xylene / o-Dimehtylbenzene / 3,4-Xylene / 1,2-Dimethylbenzol / o-Xylenes / Dimethylbenzene / 2-Methyltoluene / orthoxylene	(CAS-No.) 95-47-6	0.8 – 1.8	Flam. Liq. 2, H225 Flam. Liq. 3. H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 + H332 Skin Irrit. 2, H312 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 3, H412
Styrene	Ethenylbenzene / Vinylbenzene / Phenylethylene / Styrol/ Cinnamene / Phenylethene / Styrolene / Phenethylene / Styrene monomer / Vinylbenzol / Vinyl benzene / Styropol SO / Styren / Styrole / Stirolo / Styreen / Cinnamenol / Cinnamol / Annamene	(CAS-No.) 100-42-5	1.6 – 2.5	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, 315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 Repr. 2, H361 STOT RE 1, H372 Aquatic Chronic 3, H412
3-Ethyltoluene	1-Methyl-3-ethylbenzene / m-Ethylmethylbenzene / m-Methylethylbenzene / Toluene, m-ethyl- / 3-Methylethylbenzene / 3-Ethyl-d5-toluene / 1-Ethyl-3-methyl-benzene	(CAS-No.) 620-14-4	0.5 – 1.1	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411
1,3,5-Trimethylbenzene	Mesitylene / sym-Trimethylbenzene / 3,5-Dimethyltoluene / Fleet-X / Trimethylbenzol / s-Trimethylbenzene / 2,4,6-trimethylbenzene	(CAS-No.) 108-67-8	0.8 – 1.7	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411
Benzofuran	2,3-Benzofuran / Coumarone / 1-Benzofuran / Benzo(b)furan / Cumarone / Benzofurfuran / Coumaron / 1-Oxindene / 1-Oxidene / venzo(b)furane	(CAS-No.) 271-89-6	2.4 – 7.7	Flam. Liq. 3, H226 Carc. 2, H351 Aquatic Chronic 3, H412

1,2,3-Trimethylbenzene	Hemimellitene / Trimethylbenzene / Hemellitol / Hemimellitol / 1,3-Trimethylbenzene / Hemimellitene, 90.5% / Trimethyl benzene / 1,3-Trimethylbenzene, 90.5% / Trimethylbenzenes	(CAS-No.) 526-73-8	3.3 – 7.0	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE3, H335 STOT RE 2, H373
Indane	Indan / 2,3-Dihydro-1H-indene / Hydrindene / 1H-Indene, 2,3-dihydro- / Benzocyclopentane / 2,3-Dihydroindene / 1,2-Hydrindene / Hydrindonaphtene	(CAS-No.) 496-11-7	2.7 – 4.4	Flam. Liq. 3, H226 Asp. Tox. 1, H304
1,2,4-Trimethylbenzene	Pseudocumene / Pseudocumol / Psi-cumene / as-Trimethylbenzene / 1,3,4-Trimethylbenzene / Uns-trimethylbenzene / 1,2,5-Trimethylbenzene / Asymmetrical trimethylbenzene / pseudo-cumene	(CAS-No.) 95-63-6	2.4 – 7.7	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 2, H411
Indene	1H-Indene / Indonaphthene / Inden	(CAS-No.) 95-13-6	12.1 – 27.4	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Aquatic Chronic 2, H411
Phenol	Carbolic acid / Hydroxybenzene / Phenic acid / Oxybenzene / Benzenol / Phenylic acid / Phenylic alcohol / Monophenol / Phenyl hydrate / Phenyl hydroxide / Monohydroxybenzene / Paoscle / Phenole / Izal / Phenyl alcohol / Phenol alcohol	(CAS-No.) 108-95-2	2.8 – 5.4	Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Acute Tox. 3, H331 Muta. 2, H341 STOT RE 2, H373 Aquatic Chronic 2, H411
o-Cresol	2-Methylphenol / Orthocresol / 2-hydroxytoluene / 2-Cresol / o-methylphenol / o-Cresylic acid / o-Oxytoluene / o-Toluol / 1-Hydroxy-2methylbenzene / ortho-cresol / o-Hydroxytoluene / o-Methylphenylol / o-Kresol	(CAS-No.) 95-48-7	1.8 – 3.4	Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314
p-Cresol	4-methylphenol / 4-Cresol / 4-Hydroxytoluene / p-Methylphenol / para-Cresol / p-Hydroxytoluene / p-Tolyl alcohol / p-Kresol / p-Oxytoluene / p-Toluol / p-Cresylic acid / 1-Hydroxy-4-methylbenzene / Paracresol / p-Methylhydroxy benzene / 1-Methytl-4-hydroxybenzene / Paramethyl phenol / para-Cresylic acid / 4-methyl phenol	(CAS-No.) 106-44-5	2.3 – 4.1	Acute Tox. 3, H301 + H311 Acute Tox. 3, H301 Skin Corr. 1B, H311 / H314 Aquatic Chronic 3, H412

m-Cresol	3-methylphenol / Metracresol / Phenol, 3-methyl- / meta-cresol / 3-cresol / 3-hydroxytoluene / m-methylophenol m-kresol / m-cresylic acid / 1-hydroxy-3-methylbenzene / m-oxytoluene / m-toluol / m-Hydroxytoluene meta-cresylic acid / 1-Methyl-3-hydroxybenzene	(CAS-No.) 108-39-4	2.3 – 4.1	Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Aquatic Chronic 3, H412
2,4-Xylenol	2,4-Dimethylophenol / m-Xylenol / Phenol, 2,4-dimethyl- / Gallex / 4,6-Dimethylphenol / 1-Hydroxy-2,4-dimethylbenzene / 4-Hydroxy-1,3-dimethylbenzene	(CAS-No.) 105-67-9	0.9 – 1.7	Acute Tox. 3, H301 Acute Tox. 3, H311 Skin Corr. 1B, H314 Skin Sens. 1, H317 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Quinoline	1-Benzazine / 1-Azanaphthalene / Chinolin / Chinoleine / Chinoline / Quinolin / Leucol / Leukol / Benzopyridine / 2,3-Benzopyridine / Benzo(b)pyridine / 1-Benzine / Quinoline-3-D / Quinoline-4-D / Quinoline-5-D / Quinoline-6-D / Quinoline-7-D / Quinoline-8-D	(CAS-No.) 106-44-5	91-22-5	Acute Tox. 3, H301 Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 2, H341 Carc. 1B, H350 Aquatic Chronic 2, H411

Full text of H-phrases: see section 16.

3.2. Mixture

Not applicable

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention. In molten form: . Cool skin rapidly with cold water after contact with molten product. Removal of solidified molten material from skin requires medical assistance.

First-aid Measures After Eye Contact: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for at least 15 minutes. Obtain medical attention. In molten form: . Protect skin and eyes from contact with molten material. Removal of solidified molten material from the eyes requires medical assistance.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: May cause cancer. Suspected of damaging fertility or the unborn child. Skin sensitization. Causes skin irritation. May cause genetic defects. Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis. Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Risk of thermal burns on contact with molten product.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: Causes photosensitization, dermatitis, defatting, chronic tar dermatosis, tar or pitch warts, chronic melanosis, folliculitis, and pitch acne.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide (CO_2), alcohol-resistant foam, or dry chemical.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising from the Substance or Mixture

Fire Hazard: COMBUSTIBLE LIQUID (Flam. Liq. 4). Material can burn at elevated temperatures or in a fire.
Heating may cause pressure buildup and container rupture. May release flammable vapors when heated above flash point (>93.3°C/200°F). Vapors are heavier than air and can accumulate in low areas.

Explosion Hazard: Not classified as explosive. However, heating in a fire may cause containers to rupture violently. Vapors may form flammable mixtures with air at elevated temperatures.

Reactivity: Reacts with strong oxidizers, increasing fire risk.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Keep away from sources of ignition.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Move containers from fire area if safe to do so. Do not allow run-off from firefighting to enter drains or water courses.

Protection During Firefighting Do not enter fire area without proper protective equipment, including self-contained breathing apparatus (SCBA) and full protective clothing.

Hazardous Combustion Products: Carbon oxides (CO). Carbon dioxide (CO_2). Nitrogen oxides (NOx). Sulfur dioxide (SO2). Polycyclic-aromatic hydrocarbons (PAH), including carcinogenic compounds. Irritating or toxic vapors and dense black smoke.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses. Exposure to combustion products may be a hazard to health. Containers may explode when heated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Where possible allow molten material to solidify naturally.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Spills should be cleaned up immediately and placed in approved containers. For small molten spills, allow product to cool and remove as a solid. Use cautious judgement when cleaning up large molten spills. Wear personal protective equipment as appropriate, shut off source of leak if safe to do so, dike and contain molten material, and collect in approved containers for disposal in accordance with federal, state, and local regulations.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Elevated temperatures: Coal tar pitch may generate vapors that may ignite in the presence of air and a source of ignition. Burning may emit hazardous fumes/vapors which can form flammable/explosive mixtures in air. Upon burning, coal may produce coal tar pitch volatiles including PAH's. Coal tar pitch is classified by IARC as a group 1 carcinogen - carcinogenic to humans.

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not handle until all safety precautions have been read and understood. Do not breathe mist, spray, vapors. Obtain special instructions before use. Do not get in eyes, on skin, or on clothing.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities Technical

Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. **Incompatible Materials:** Oxidizers.

7.3. Specific End Use(s) Chemical feedstock

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Naphthalene (91-20-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route,Confirmed Animal Carcinogen with Unknown Relevance to Humans
USA ACGIH	Biological Exposure Indices (BEI)	Parameter: 1-Naphthol with hydrolysis plus 2-Naphthol with hydrolysis - Sampling time: end of shift (nonquantitative, nonspecific)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	50 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm

USA NIOSH	NIOSH REL (STEL) (mg/m³)	75 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA IDLH	US IDLH (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm

Benzene (71-43-2)		
USA ACGIH	ACGIH TWA (ppm)	0.02 ppm
USA ACGIH	ACGIH chemical category	A1 – Confirmed Human Carcinogen; Skin – potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	Biological Exposure Indices (BEI)	Under Study
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.32 mg/m^3
USA NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	3.2 mg/m^3
USA NIOSH	NIOSH REL (STEL) (ppm)	1 ppm
USA IDLH	US IDLH (ppm)	Ca (500 ppm)
USA OSHA	OSHA PEL (TWA) (mg/m³)	3.19 mg/m^3
USA OSHA	OSHA PEL (TWA) (ppm)	1 ppm

Coal Tar Pitch Volatiles		
USA ACGIH	ACGIH TWA (ppm)	
USA ACGIH	ACGIH chemical category	A1 – Confirmed Human Carcinogen (as benzene-soluble aerosol)
USA ACGIH	Biological Exposure Indices (BEI)	No BEI established
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.1 mg/m^3
USA NIOSH	NIOSH REL (TWA) (ppm)	
USA NIOSH	NIOSH REL (STEL) (mg/m³)	
USA NIOSH	NIOSH REL (STEL) (ppm)	
USA IDLH	US IDLH (ppm)	80 mg/m^3
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.2 mg/m^3
USA OSHA	OSHA PEL (TWA) (ppm)	

Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm

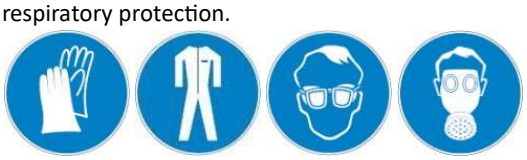
USA ACGIH	ACGIH chemical category	A4 – Not Classifiable as a Human Carcinogen; Skin – potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	Biological Exposure Indices (BEI)	Toluene in urine: 0.3 mg/L (end of shift); o-Cresol in urine: 0.3 mg/g creatinine (end of shift)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	375 mg/m^3
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	560 mg/m^3
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
USA IDLH	US IDLH (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	754 mg/m^3
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm *(Table Z-2; ceiling 300 ppm; peak 500 ppm/10 min)*

Phenol (108-95-2)		
USA ACGIH	ACGIH TWA (ppm)	5 ppm (19 mg/m^3; Skin notation applies)
USA ACGIH	ACGIH chemical category	A4 – Not Classifiable as a Human Carcinogen; Skin – potential significant contribution to overall exposure by the cutaneous route
USA ACGIH	Biological Exposure Indices (BEI)	Phenol in urine: 250 mg/g creatinine (end of shift)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	19 mg/m^3
USA NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	60 mg/m^3 (15-min ceiling)
USA NIOSH	NIOSH REL (STEL) (ppm)	15.6 ppm (15-min ceiling)
USA IDLH	US IDLH (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	19 mg/m^3
USA OSHA	OSHA PEL (TWA) (ppm)	5 ppm

8.2. Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.
Hand Protection: Wear protective gloves (nitrile ≥8 mil or neoprene)
Eye and Face Protection: Chemical safety goggles (ANSI Z87.1)
Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection:	If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn (OV/P100 cartridges). In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Other Information:	When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State:	Liquid
Appearance:	Dark brown to black; 2.5Y2/2 to 2.5Y4/2 on the Munsell color scheme
Odor:	Sharp, aromatic, wood-like
Odor Threshold:	No determined
pH:	6 -8
Evaporation Rate:	Not determined
Melting Point:	Not applicable (complex UVCB mixture)
Freezing Point:	Not applicable (complex UVCB mixture)
Boiling Point:	295 – 453 °C (563 – 847.4 °F)
Flash Point:	96 °C (204.8 °F) PMCC
Auto-ignition Temperature:	>560 °C (>1040 ^{o}F) (DIN 52027)
Decomposition Temperature:	No determined
Flammability (solid, gas):	Not applicable
Vapor Pressure:	<0.1 kPa @ 20 ^{o}C (<0.75 mmHg @ 20 ^{o}C)
Relative Vapor Density at 20°C:	>1.0
Relative Density:	1.13 g/cm^3 @ 20 ^{o}C (ASTM D4052); approximately 9.4 lbs/gal
Solubility:	313 µg/mL in water (slightly soluble); soluble in benzene, toluene, chloroform, and organic solvents
Partition Coefficient: N-Octanol/Water:	Log Kow = 3.247
Viscosity:	133 mm^2/s @ 20 ^{o}C (DIN 53019)

9.2. Other Information

Chemical Formula: Complex UVCB hydrocarbon mixture; primarily 2- to 4-membered condensed-ring aromatic hydrocarbons (PAHs), phenolic compounds, and aromatic nitrogen bases. No single molecular formula applicable.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials: Oxidizers.

10.6. Hazardous Decomposition Products: Not expected to decompose under ambient conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified

Naphthalene (91-20-3)	
LD50 Oral Rat	533 – 710 mg/kg
LC50 Inhalation Rat	> 340 mg/m³ (Exposure time: 1 h)

Skin Corrosion/Irritation: Causes skin irritation.
Serious Eye Damage/Irritation: Not classified
Respiratory or Skin Sensitization: May cause an allergic skin reaction.
Germ Cell Mutagenicity: May cause genetic defects.
Carcinogenicity: May cause cancer.

Naphthalene (91-20-3)	
IARC group	2B
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child. **Specific**
Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Redness, pain, swelling, itching, burning, dryness, and dermatitis. Risk of thermal burns on contact with molten product.
Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Risk of thermal burns on contact with molten product.
Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.
Chronic Symptoms: Causes photosensitization, dermatitis, defatting, chronic tar dermatosis, tar or pitch warts, chronic melanosis, folliculitis, and pitch acne.

Interactive Effects: Coal Tar Distillates is a complex UVCB substance containing more than 20 identified components that exhibit additive and synergistic toxic interactions. The following interactive effects are relevant to occupational exposure:

1. **PAH Carcinogenic Synergy:** Naphthalene (16.0–30.7%) and indene (12.1–27.4%) are the dominant PAH components. Benzo[a]pyrene and other higher-molecular-weight PAHs present in coal tar pitch volatiles generated during heated processing are potent carcinogens. PAHs do not act in isolation — multiple PAH components interact additively and synergistically through shared metabolic activation pathways (cytochrome P450-mediated oxidation, DNA adduct formation), producing a combined carcinogenic burden greater than any single component alone. The overall mixture is classified by IARC as a known human carcinogen based on occupational distillation studies.

2. **Benzene Carcinogenicity Enhancement:** Benzene (1.9–5.7%, Carc. 1A, IARC Group 1) is a confirmed human carcinogen causing leukemia and myelodysplastic syndrome. When co-exposed with other PAH components in this mixture, benzene's hematotoxic effects may be additive with the broader carcinogenic activity of the PAH fraction. The ACGIH TLV for benzene was revised in 2024 to 0.02 ppm — 50 times lower than the OSHA PEL — reflecting recognition that no safe threshold has been established for this Carc. 1A substance.

3. **Phenol and Cresol Dermal Penetration Enhancement:** Phenol (2.8–5.4%) and the cresols (o-, m-, p-cresol; 2.3–4.1% each) are corrosive (Skin Corr. 1B) and act as dermal penetration enhancers. Skin absorption of phenolics may significantly increase the total systemic dose of co-present PAH carcinogens beyond what inhalation exposure alone would suggest. Workers with skin contact receive a greater effective dose than air monitoring alone would indicate.

4. **Phototoxicity:** PAH components — particularly naphthalene, indene, benzofuran, and trimethylbenzene isomers — are phototoxic. Skin contact followed by ultraviolet or sunlight exposure produces photoactivated dermal reactions, including erythema, blistering, hyperpigmentation, and chronic melanosis. Workers contaminated with this material must decontaminate thoroughly and avoid sun or UV exposure for a minimum of 24–48 hours following skin contact.

5. **Sensitization Progression:** Skin sensitization (H317) driven primarily by 2,4-xylenol (0.9–1.7%) is worsened by concurrent skin irritation (H315) from multiple components. Repeated dermal exposure leads to progressive allergic contact dermatitis. Once sensitized, workers may react to trace concentrations well below occupational exposure limits.

6. **Aspiration Hazard from Volatile Aromatic Components:** Multiple components in this mixture carry Asp. Tox. 1 (H304) classifications, including benzene, toluene, ethylbenzene, xylene isomers, indane, indene, trimethylbenzenes, and styrene. If the material is swallowed and vomiting occurs, aspiration into the airways may cause chemical pneumonitis. **Do NOT induce vomiting**. Seek immediate medical attention.

Alternative Information Sources:

Coal Tar Distillates is a UVCB substance for which complete mixture-specific toxicological testing data are not available. Hazard classification has been determined using the following data sources and approaches in accordance with GHS Revision 7 guidance for complex substances:

Component-Based Classification: Classifications for the substance as a whole are derived from data on identified components using GHS mixture classification rules (additivity, concentration thresholds, and bridging principles). Major components driving the overall classification are: naphthalene (16.0–30.7%), indene (12.1–27.4%), benzene (1.9–5.7%), phenol (2.8–5.4%), benzofuran (2.4–7.7%), and the cresol and trimethylbenzene fractions.

Primary Data Sources:

- IARC Monograph Volume 92 (2010): *Coal Tars and Coal-Tar Pitches* — concludes sufficient evidence of human carcinogenicity for occupational coal-tar distillation exposures
- IARC Monograph Volume 100F (2012): *Benzene* — IARC Group 1, confirmed human carcinogen
- ATSDR Toxicological Profile for Polycyclic Aromatic Hydrocarbons (PAHs), 1995 and updated reviews
- EPA IRIS Assessments for naphthalene (CASRN 91-20-3) and benzene (CASRN 71-43-2)
- NIOSH Criteria Document: *Occupational Exposure to Coal Tar Products*
- National Toxicology Program (NTP) 15th Report on Carcinogens: Coal Tars and Coal-Tar Pitches listed as *Known to be Human Carcinogens*
- Health Canada Screening Assessment: *Coal Tars and Their Distillates* (2015)

Carcinogenicity Basis: The Carc. 1B classification for the substance is derived from: (1) demonstrated carcinogenicity of coal tar distillate occupational exposures in human epidemiological studies (increased incidence of skin, lung, and bladder cancers in tar distillation workers); (2) the presence of benzene (Carc. 1A) at 1.9–5.7%; and (3) the presence of naphthalene (Carc. 2, IARC 2B) at 16.0–30.7%, which is also listed as a potential human carcinogen by NTP.

Reproductive Toxicity Basis: The Repr. 2 (H361) classification is derived from reproductive toxicity data for toluene (2.6–3.5%) and styrene (1.6–2.5%), both classified Repr. 2, present at concentrations sufficient to trigger mixture classification under GHS additive rules.

Mutagenicity Basis: The Muta. 1B (H340) classification is based on genotoxicity data for benzene (Muta. 1B) and confirmed by the presence of quinoline (Muta. 2, Carc. 1B) and phenol (Muta. 2). Positive results in Ames and chromosomal aberration assays for coal tar fractions support this classification.

Measurement Methods for Occupational Monitoring: NIOSH Method 5506 (PAHs by HPLC) and OSHA Method 58 (coal tar pitch volatiles, benzene-soluble fraction) are the standard industrial hygiene monitoring methods for occupational exposures to this material.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Very toxic to aquatic life with long lasting effects.

Naphthalene (91-20-3)	
LC50 Fish 1	5.74 – 6.44 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flowthrough])
EC50 Daphnia 1	2.16 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	1.6 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2	1.96 mg/l (Exposure time: 48 h - Species: Daphnia magna [Flow through])

12.2. Persistence and Degradability

COAL TAR DISTILLATES (65996-92-1)	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

COAL TAR DISTILLATES (65996-92-1)	
Bioaccumulative Potential	Not established.

Naphthalene (91-20-3)	
BCF Fish 1	30 – 430
Partition coefficient n-octanol/water (Log Pow)	3.6

12.4. Mobility in Soil: No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Distillates, coal tar; Naphthalene)
Hazard Class: 9
Identification Number: UN3082
Packing Group: III
Label Codes: 9
Marine Pollutant: Yes
ERG Number: 171

14.2. In Accordance with IMDG

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Distillates, coal tar; Naphthalene)
Hazard Class: 9
Identification Number: UN 3082
Packing Group: III
Label Codes: 9
EmS-No. (Fire): F-A
EmS-No. (Spillage): S-F
Marine Pollutant: Yes

14.3. In Accordance with IATA

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Distillates, coal tar; Naphthalene)
Hazard Class: 9
Identification Number: UN 3082
Packing Group: III

Label Codes:	9
ERG Code (IATA)	9L

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

COAL TAR DISTILLATES (65996-92-1)	
SARA Section 311/312 Hazard Classes	Health hazard - Carcinogenicity Health hazard - Reproductive toxicity Health hazard - Respiratory or skin sensitization Health hazard - Skin corrosion or Irritation Health hazard - Germ cell mutagenicity

Distillates, coal tar (65996-92-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Naphthalene (91-20-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	0.1 %

Benzene (71-43-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	10 lb
SARA Section 313 - Emission Reporting	0.1 %

Toluene (108-88-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1,000 lb
SARA Section 313 - Emission Reporting	1.0 %

Ethylbenzene (100-41-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1,000 lb
SARA Section 313 - Emission Reporting	0.1 %

p-Xylene (106-42-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1.0 %

m-Xylene (108-38-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1,000 lb
SARA Section 313 - Emission Reporting	1.0 %

o-Xylene (95-47-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1,000 lb
SARA Section 313 - Emission Reporting	1.0 %

Styrene (100-42-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1,000 lb
SARA Section 313 - Emission Reporting	0.1 %

1,3,5-Trimethylbenzene (108-67-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	0.1 %

Benzofuran (271-89-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1,2,3-Trimethylbenzene (526-73-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Indane (496-11-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

1,2,4-Trimethylbenzene (95-63-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	1.0 %

Indene (95-13-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phenol (108-95-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	1,000 lb
SARA Section 313 - Emission Reporting	1.0 %

o-Cresol (95-48-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1.0 %

p-Cresol (106-44-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1.0 %

m-Cresol (108-39-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1.0 %

2,4-Xylenol (105-67-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
SARA Section 313 - Emission Reporting	1.0 %

Quinoline (91-22-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5,000 lb
SARA Section 313 - Emission Reporting	0.1 %

15.2. US State Regulations

Naphthalene (91-20-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

California Proposition 65

WARNING: This product can expose you to Naphthalene, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Chemical Name (CAS No.)	Carcinogenicity	Developmental Toxicity	Female Reproductive Toxicity	Male Reproductive Toxicity
Naphthalene (91-20-3)	X			

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision: 05/18/2026

Previous Revision Date: 06/03/2024 (Version 2.0)

Version: 3.0

Revision Summary: Updated to comply with OSHA Hazard Communication Standard 29 CFR 1910.1200 as amended May 20, 2024 (GHS Revision 7). Updated header compliance citation from Federal Register Vol. 77, No. 58 (March 26, 2012) to Federal Register Vol. 89, No. 98 (May 20, 2024) on all pages. Added Flam. Liq. 4 (H227 — Combustible liquid) classification to Section 2.1. Added GHS02 (Flame) pictogram to Section 2.2 label elements. Added H227 hazard statement to Section 2.2. Added combustible liquid precautionary statements P210, P370+P378, and P403+P235 to Section 2.2. Updated Skin Sens. 1 to Skin Sens. 1B throughout. Corrected Section 5 fire hazard description to accurately reflect combustible liquid classification with flash point significance explanation. Added benzene (Carc. 1A) occupational exposure limits to Section 8.1, including updated ACGIH TLV of 0.02 ppm (revised January 2024), NIOSH REL 0.1 ppm TWA, and OSHA PEL 1 ppm TWA per 29 CFR 1910.1028. Added toluene, phenol, and coal tar pitch volatiles occupational exposure limits to Section 8.1. Added interactive effects paragraph to Section 11 addressing PAH carcinogenic synergy, benzene co-exposure, phenol/cresol dermal penetration enhancement, phototoxicity, sensitization progression, and aspiration hazard from volatile aromatic components. Added alternative information sources paragraph to Section 11 documenting component-based classification methodology, IARC, ATSDR, EPA IRIS, NTP, and NIOSH data sources. Added particle characteristics statement to Section 9. Updated all regulatory references throughout to reflect current listings.

Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1B	Carcinogenicity Category 1B
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Flam. Sol. 2	Flammable solids Category 2
Muta. 1B	Germ cell mutagenicity Category 1B
Repr. 2	Reproductive toxicity Category 2
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H227	Combustible liquid
H228	Flammable solid
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H340	May cause genetic defects
H341	Suspected of causing genetic defects
H350	May cause cancer
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H373	May cause damage to organs through prolonged or repeated exposure

H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)

NFPA 704 Diamond Rating System:

NFPA Health Hazard: **3** – Materials that, under emergency conditions, can cause serious or permanent injury. Justification: IARC Group 2A carcinogen (probably carcinogenic to humans). Multiple serious health hazards including carcinogenicity (H350), germ cell mutagenicity (H340, H341), reproductive toxicity (H360), organ damage (H373), and skin sensitization (H317). Severe phototoxicity with UV exposure.

NFPA Fire Hazard: **2** - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Justification: Flash point >93.3°C (>200°F) PMCC. Classified as combustible liquid (Flam. Liq. 4 / H227). Requires moderate heating before ignition.

NFPA Reactivity Hazard: **0** - Materials that in themselves are normally stable, even under fire conditions. Justification: Stable under normal conditions and in fire. No hazardous polymerization. Reaction with strong oxidizers is not unusual for organic materials.

NFPA Special Hazard: None

NFPA 704 Diamond: