

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Date of Issue: 09/02/2020

Version: 1.0

### **SECTION 1: IDENTIFICATION**

1.1. Product Identifier
Product Form: Substance
Product Name: Refined Tar
Chemical Name: Aromatic pitch

CAS-No.: 68187-57-5

Synonyms: Modified RT-12, RT-9, RT-12, RT-240

1.2. Intended Use of the Product

Use of the Substance/Mixture: Driveways, roadways, roofing, manufacturing1.3. Name, Address, and Telephone of the Responsible Party

Company

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

www.lonestarspecialties.net

1.4. Emergency Telephone Number

Emergency Number : 800-424-9300 (CHEMTREC)

#### **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the Substance or Mixture

 Skin Sens. 1
 H317

 Muta. 1B
 H340

 Carc. 1A
 H350

 Repr. 1B
 H360

 STOT RE 1
 H372

 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)







Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H317 - May cause an allergic skin reaction.

H340 - May cause genetic defects.

H350 - May cause cancer.

H360 - May damage fertility or the unborn child.

H372 - Causes damage to organs through prolonged or repeated exposure.

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.

P260 - Do not breathe vapors, mist, or spray.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

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.

P314 - Get medical advice/attention if you feel unwell.

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P321 - Specific treatment (see section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage.

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 : Refined Tar CAS-No. : 68187-57-5

Name	Synonyms	Product Identifier	%	GHS US classification
Pitch, coal tar-petroleum	Pitch, coal tar, petroleum / Pitch residues / Pitch, coal tarpetroleum - pitch residues / Pitch, coal tarpetroleum - pitch residue from the distillation of a mixture of coal tar and aromatic petroleum streams. A solid with a softening point from 40-180°C. Composed primarily of a complex combination of three or more membered condensed ring aromatic hydrocarbons.) / Coal and petroleum pitches, pitches and sublimates / Coal and petroleum tars, pitches and their sublimates / Pitch, coal tarpetroleum; Pitch Residues [The residue from the distillation of a mixture of coal tar and aromatic petroleum streams. A solid with a softening point from 40°C to 180°C (140°F to 356°F). Composed; primarily of a complex combination of three or more membered condensed ring aromatic hydrocarbons.]	(CAS-No.) 68187-57-5	100	Skin Sens. 1, H317 Muta. 1B, H340 Carc. 1A, H350 Repr. 1B, H360 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Coal tar petroleum is a UVCB substance and may contain the following substances in appreciable amounts.

Name	Synonyms	Product Identifier	%	GHS US classification
Naphthalene	Naphthalene, molten / Naphthalene, crude / Naphthalenes / Moth balls	(CAS-No.) 91-20-3	< 20	Flam. Sol. 2, H228 Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust
Anthracene	Paranaphthalene / Green oil	(CAS-No.) 120-12-7	< 2.5	Acute Tox. 4 (Dermal), H312 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Comb. Dust

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Benzene	Cyclohexatriene / Benzol	(CAS-No.) 71-43-2	< 2	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Muta. 1B, H340 Carc. 1A, H350 STOT SE 3, H336 STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
Benzo(a)pyrene	Benzo[a]pyrene / 3,4- Benz(a)pyrene / Benz(a)pyrene / Benzo[def]chrysene / 3,4- Benzopyrene / 6,7-Benzopyrene / Benzopyrene / Bap / Benz[a]pyrene / 3,4- Benzo(a)pyrene / 3,4-Benzpyrene	(CAS-No.) 50-32-8	< 2	Skin Sens. 1, H317 Muta. 1B, H340 Carc. 1B, H350 Repr. 1B, H360 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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. Drench affected area with water for at least 15 minutes. If exposed or concerned: Get medical advice/attention. Obtain medical attention if irritation/rash develops or persists.

**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.

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. Causes damage to organs through prolonged or repeated exposure. Skin sensitization. May cause genetic defects. May damage fertility. May damage the unborn child. Contact with hot liquid may cause thermal burns.

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

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

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

**Chronic Symptoms:** May cause cancer. May cause genetic defects. May damage fertility or the unborn child. Causes damage to organs (blood, thyroid gland, liver) through prolonged or repeated exposure.

### 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<sub>2</sub>), 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: Not considered flammable but may burn at high temperatures. May release flammable vapors.

**Explosion Hazard:** Product is not explosive.

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

#### 5.3. Advice for Firefighters

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

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**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides. Sulfur dioxide. Polycyclic-aromatic hydrocarbons

(PAH).

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing. Do not handle until all safety precautions have been read and understood.

#### 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. **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.

#### 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: Flammable vapours can accumulate in head space of closed systems.

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

# 7.3. Specific End Use(s)

Driveways, roadways, roofing, manufacturing

# **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/m <sup>3</sup>
USA NIOSH	NIOSH REL (TWA) (ppm)	10 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	75 mg/m³

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USA NIOSH	NIOSH REL (STEL) (ppm)	15 ppm
USA IDLH	US IDLH (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	50 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
Anthracene (	120-12-7)	
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.2 mg/m³ (Coal tar pitch volatiles)
Benzo(a)pyre	ene (50-32-8)	
USA ACGIH	ACGIH chemical category	Suspected Human Carcinogen
USA ACGIH	Biological Exposure Indices (BEI)	2.5 μg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium:
		urine - Sampling time: end of shift at end of workweek
		(background)
		Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium:
		urine - Sampling time: end of shift at end of workweek
		(nonquantitative)
USA OSHA	OSHA PEL (TWA) (mg/m³)	0.2 mg/m³ (Coal tar pitch volatiles)
Benzene (71-	43-2)	
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm
USA ACGIH	ACGIH STEL (ppm)	2.5 ppm
USA ACGIH	ACGIH chemical category	Skin - potential significant contribution to overall exposure by the
		cutaneous route,Confirmed Human Carcinogen
USA ACGIH	Biological Exposure Indices (BEI)	25 μg/g Kreatinin Parameter: S-Phenylmercapturic acid - Medium:
		urine - Sampling time: end of shift (background)
		500 μg/g Kreatinin Parameter: t,t-Muconic acid - Medium: urine -
		Sampling time: end of shift (background)
USA NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (STEL) (ppm)	1 ppm
USA IDLH	US IDLH (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	10 ppm
		1 ppm
USA OSHA	OSHA PEL (STEL) (ppm)	5 ppm (see 29 CFR 1910.1028)
USA OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm
USA OSHA	Acceptable Maximum Peak Above The	50 ppm Peak (10 minutes)
	Acceptable Ceiling Concentration For An 8-	
	Hr Shift	

# 8.2. Exposure Controls

**Appropriate Engineering Controls** 

: Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released.

#### **Personal Protective Equipment**

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









Materials for Protective Clothing Hand Protection

Eye and Face Protection
Skin and Body Protection
Respiratory Protection

: Chemically resistant materials and fabrics.

: Wear protective gloves.

- : Chemical safety goggles.
- : Wear suitable protective clothing.
- : If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Thermal Hazard Protection** 

Other Information

- : When working with hot material, use suitable thermally protective clothing.
- : When using, do not eat, drink or smoke.

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### **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

Odor Threshold : No data available

pH : 7-8

Evaporation Rate: No data availableMelting Point: No data availableFreezing Point: No data availableBoiling Point: 66 °C (150.8 °F)

Flash Point : 218 °C (424 °F) (open cup)

Auto-ignition Temperature: > 560 °C (1040 °F)Decomposition Temperature: No data availableFlammability (solid, gas): Not applicable

**Vapor Pressure** : < 0.1 kPa @ 20 °C (68 °F)

Relative Vapor Density at 20°C : > 1 (air = 1) @ 20 °C (68 °F): 1, 1-1, 3 g/cm3 (ATSM D4052)

Relative Density : No data available

Density : 8.7 lb/gal

Solubility : Water: 313 μg/mL

Partition Coefficient: N-Octanol/Water : 3.247

**Viscosity** : 133 mm<sup>2</sup>/s 20 °C (68 °F) (DIN 53019)

Chemical Formula : Complex hydrocarbon mixture which includes polynuclear aromatic

hydrocarbons (PAHs)

Molecular Weight : Not applicable

**9.2.** Other Information No additional information available

# **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:** Strong oxidizers.

10.6. Hazardous Decomposition Products: None expected under normal conditions of use.

#### **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)
Anthracene (120-12-7)	
LD50 Oral Rat	> 16 g/kg
LD50 Dermal Rat	> 1320 mg/kg
ATE (Dermal)	1,100.00 mg/kg body weight
Benzene (71-43-2)	
LD50 Oral Rat	810 mg/kg
LD50 Dermal Rabbit	> 8200 mg/kg
LC50 Inhalation Rat	44.66 mg/l/4h

Skin Corrosion/Irritation: Not classified

**pH:** 7 - 8

Serious Eye Damage/Irritation: Not classified

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**pH**: 7 - 8

**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.
Anthracene (120-12-7)	
IARC group	3
Benzo(a)pyrene (50-32-8)	
IARC group	1
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
Benzene (71-43-2)	
IARC group	1
National Toxicology Program (NTP) Status	Evidence of Carcinogenicity, Known Human Carcinogens.
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.

Reproductive Toxicity: May damage fertility or the unborn child. Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction. Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer. May cause genetic defects. May damage fertility or the unborn child. Causes damage to

organs (blood, thyroid gland, liver) through prolonged or repeated exposure.

# **SECTION 12: ECOLOGICAL INFORMATION**

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**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 [flow-through])
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])
Anthracene (120-12-7)	
LC50 Fish 1	0 - 0.00318 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
EC50 Daphnia 1	0.081 - 0.112 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	0.00278 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Benzo(a)pyrene (50-32-8)	
EC50 Daphnia 1	0.005 mg/l
ErC50 (Algae)	0.005 mg/l
NOEC Chronic Fish	0.0024 mg/l
Benzene (71-43-2)	
LC50 Fish 1	10.7 - 14.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	8.76 - 15.6 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC50 Fish 2	5.3 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2	10 mg/l (Exposure time: 48 h - Species: Daphnia magna)
ErC50 (Algae)	29 mg/l
NOEC Chronic Fish	0.8 mg/l

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#### Persistence and Degradability 12.2.

Refined Tar (68187-57-5)	
Persistence and Degradability	May cause long-term adverse effects in the environment.

#### 12.3. **Bioaccumulative Potential**

Refined Tar (68187-57-5)		
Bioaccumulative Potential	Not established.	
Naphthalene (91-20-3)		
BCF Fish 1	30 - 430	
Log Pow	3.6	
Anthracene (120-12-7)		
BCF Fish 1	903 - 2820	
Log Pow	4.54	
Benzo(a)pyrene (50-32-8)		
Log Pow	6.06	
Benzene (71-43-2)		
BCF Fish 1	3.5 - 4.4	
Log Pow	2.1	

#### 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**

#### **Waste Treatment Methods**

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

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. When shipped  $< 212 \, ^{\circ}F (100 \, ^{\circ}C)$ :

#### In Accordance with DOT 14.1.

: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (COAL TAR PETROLEUM) **Proper Shipping Name** 

: 9 **Hazard Class** 

**Identification Number** : UN3082

: 9 **Label Codes Packing Group** 

Marine Pollutant : Marine pollutant

**ERG Number** : 171 14.2. In Accordance with IMDG

**Proper Shipping Name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (COAL TAR PETROLEUM)

**Hazard Class** : 9

**Identification Number** : UN3082 **Packing Group** Ш **Label Codes** : 9 : F-A EmS-No. (Fire) EmS-No. (Spillage) : S-F

**Marine Pollutant** : Marine pollutant

In Accordance with IATA

: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (COAL TAR PETROLEUM) **Proper Shipping Name** 

**Packing Group** : 111

: UN3082 **Identification Number** 

**Hazard Class** : 9





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: 9 **Label Codes ERG Code (IATA)** : 9L

When shipped > 212 °F (100 °C), but < flash point:

#### In Accordance with DOT 14.1.

: ELEVATED TEMPERATURE LIQUID, N.O.S. (COAL TAR PETROLEUM) **Proper Shipping Name** 

**Hazard Class** : 9 **Identification Number** : UN3257

: 9 **Label Codes Packing Group** : 111

**Marine Pollutant** : Marine pollutant

**ERG Number** : 128 In Accordance with IMDG 14.2.

**Proper Shipping Name** : ELEVATED TEMPERATURE LIQUID, N.O.S. (COAL TAR PETROLEUM)

**Hazard Class** : 9 **Identification Number** : UN3257 **Packing Group** : 111 **Label Codes** : 9

: F-A EmS-No. (Fire) EmS-No. (Spillage) : S-P

**Marine Pollutant** : Marine pollutant



: ELEVATED TEMPERATURE LIQUID, N.O.S. (COAL TAR PETROLEUM) **Proper Shipping Name** 

**Identification Number** : UN3257

**Hazard Class** : 9 **Label Codes** : 9 **ERG Code (IATA)** : 9L

When shipped > than flash point:

14.1. In Accordance with DOT

**Proper Shipping Name** : ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. (COAL TAR PETROLEUM)

**Hazard Class** : 3 **Identification Number** : UN3256

**Label Codes** : 3 **Packing Group** : 111

**Marine Pollutant** : Marine pollutant

**ERG Number** : 128 14.2. In Accordance with IMDG

**Proper Shipping Name** : ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. (COAL TAR PETROLEUM)

**Hazard Class** : 3

**Identification Number** : UN3256 **Packing Group** : 111 **Label Codes** : 3 : F-E EmS-No. (Fire) EmS-No. (Spillage) : S-D

**Marine Pollutant** : Marine pollutant

In Accordance with IATA 14.3.

: ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. (COAL TAR PETROLEUM) **Proper Shipping Name** 

**Identification Number** : UN3256

**Hazard Class** : 3 **Label Codes** : 3 **ERG Code (IATA)** : 3L





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### **SECTION 15: REGULATORY INFORMATION**

### 15.1. US Federal Regulations

15.1. US Federal Regulations		
Refined Tar (68187-57-5)	1	
SARA Section 311/312 Hazard Classes	Health hazard - Carcinogenicity	
	Health hazard - Specific target organ toxicity (single or repeated	
	exposure)	
	Health hazard - Respiratory or skin sensitization	
	Health hazard - Germ cell mutagenicity	
	Health hazard - Reproductive toxicity	
Pitch, coal tar-petroleum (68187-57-5)		
Listed on the United States TSCA (Toxic Substances Con	ntrol Act) inventory	
Naphthalene (91-20-3)		
Listed on the United States TSCA (Toxic Substances Cor	, · · · · ·	
Subject to reporting requirements of United States SAF	RA Section 313	
CERCLA RQ	100 lb	
SARA Section 313 - Emission Reporting	0.1 %	
Anthracene (120-12-7)		
Listed on the United States TSCA (Toxic Substances Cor	ntrol Act) inventory	
Subject to reporting requirements of United States SARA Section 313		
CERCLA RQ	5000 lb	
SARA Section 313 - Emission Reporting	1 %	
Benzo(a)pyrene (50-32-8)		
Listed on the United States TSCA (Toxic Substances Cor	•	
Subject to reporting requirements of United States SAF	RA Section 313	
CERCLA RQ	1 lb	
SARA Section 313 - Emission Reporting	0.1 %	
Benzene (71-43-2)		
Listed on the United States TSCA (Toxic Substances Cor	· · · · · · · · · · · · · · · · · · ·	
Subject to reporting requirements of United States SAF	RA Section 313	
CERCLA RQ	10 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

### Anthracene (120-12-7)

- 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

# Benzo(a)pyrene (50-32-8)

- 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) Special Hazardous Substances
- U.S. Pennsylvania RTK (Right to Know) List

# Benzene (71-43-2)

- 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) Special Hazardous Substances

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According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

U.S. - Pennsylvania - RTK (Right to Know) List

### **California Proposition 65**



**WARNING:** This product can expose you to Benzene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. 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			
Benzo(a)pyrene (50-32-8)	X			
Benzene (71-43-2)	Х	X		X

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

Date of Preparation or Latest Revision : 09/02/2020

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 Aquatic Acute 2 Hazardous to the aquatic environment - Acute Hazard Category 1 Aquatic Acute 2 Hazardous to the aquatic environment - Acute Hazard Category 1 Aquatic Chronic 1 Hazardous to the aquatic environment - Chronic Hazard Category 1 Aquatic Chronic 3 Hazardous to the aquatic environment - Chronic Hazard Category 3 Asp. Tox. 1 Aspiration hazard Category 1 Carc. 1A Carc. 1B Carcinogenicity Category 1B Carc. 2 Carcinogenicity Category 2 Comb. Dust Combustible Dust Combustible Dust Combustible Dust Eye Irrit. 2A Flam. Liq. 2 Flammable liquids Category 2 Flam. Sol. 2 Flam. Sol. 2 Flammable solids Category 2 Flam. Sol. 2 Flam. Be Reproductive toxicity Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 2 Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 Highly flammable liquid and vapor Hazze Hammable solid Ha300 Harmful if swallowed Ha311 May cause an allergic skin reaction Ha312 Harmful in contact with skin Ha315 Causes skin irritation May cause respiratory irritation May cause respiratory irritation May cause respiratory irritation May cause respiratory irritation May cause dange to organs through prolonged or repeated exposure	Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Aquatic Acute 1 Aquatic Acute 2 Hazardous to the aquatic environment - Acute Hazard Category 1 Aquatic Acute 2 Hazardous to the aquatic environment - Acute Hazard Category 2 Aquatic Chronic 1 Hazardous to the aquatic environment - Chronic Hazard Category 1 Aquatic Chronic 3 Hazardous to the aquatic environment - Chronic Hazard Category 3 Asp. Tox. 1 Aspiration hazard Category 1 Carc. 1A Carc. 1B Carcinogenicity Category 1B Carc. 2 Carcinogenicity Category 2 Comb. Dust Combstible Dust Eye Irrit. 2A Serious eye damage/eye Irritation Category 2A Flam. Liq. 2 Flammable liquids Category 2 Muta. 1B Germ cell mutagenicity Category 2 Muta. 1B Germ cell mutagenicity Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 1B Skin Irrit. 2 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 Highly flammable liquid and vapor Highly flammable liquid and vapor Hazardous to the aquatic environment - Acute Hazard Category 1 Harmful if swallowed and enters airways Haila Harmful in contact with skin Causes skin irritation Haila May cause an allergic skin reaction Haila May cause an allergic skin reaction Haila May cause genetic defects Haila May cause genetic defects Haila May cause genetic defects Haila Supected of causing cancer Haila Supected of causing cancer	` '	
Aquatic Acute 2 Aquatic Chronic 1 Hazardous to the aquatic environment - Acute Hazard Category 2 Aquatic Chronic 1 Hazardous to the aquatic environment - Chronic Hazard Category 1 Aquatic Chronic 3 Hazardous to the aquatic environment - Chronic Hazard Category 3 Asp. Tox. 1 Carc. 1A Carcinogenicity Category 1A Carc. 1B Carc. 2 Carcinogenicity Category 1B Carc. 2 Carcinogenicity Category 2 Comb. Dust Eye Irrit. 2A Serious eye damage/eye Irritation Category 2A Flam. Liq. 2 Flam. Sol. 2 Flammable liquids Category 2 Muta. 1B Germ cell mutagenicity Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 1B Skin Irrit. 2 Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable solid Harmful if swallowed Harmful if swallowed Harmful in contact with skin H312 Harmful in contact with skin Causes skin irritation H336 May cause an allergic skin reaction May cause genetic defects H350 May cause respiratory irritation May cause engeretic defects H350 May cause genetic defects H350 May damage fertility or the unborn child	· · · · · · · · · · · · · · · · · · ·	.,
Aquatic Chronic 1 Aquatic Chronic 3 Aquatic Chronic 3 App. Tox. 1 Asp. Tox. 1 Asp. Tox. 1 Carc. 1A Carc. 1B Carc. 1B Carc. 2 Combustible Dust Combustible Dust Carlingenicity Category 2 Carbina Sol. 2 Flammable Iquidia Category 2 Flam. Sol. 2 Flammable solids Category 1B Skin Irrit. 2 Skin Sens. 1 Skin Sens. 1 Specific target organ toxicity (repeated exposure) Category 1 STOT RE 1 Specific target organ toxicity (single exposure) Category 3 Hagge H	Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Asp. Tox. 1 Carc. 1A Carc. 1B Carcinogenicity Category 1B Carc. 2 Carcinogenicity Category 2 Comb. Dust Cyclinogenicity Category 2 Comb. Dust Eye Irrit. 2A Serious eye damage/eye irritation Category 2 Flam. Liq. 2 Flammable liquids Category 2 Flam. Sol. 2 Flammable solids Category 2 Muta. 1B Gern cell mutagenicity Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 2 Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed H304 May be fatal if swallowed and enters airways H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause genetic defects H340 May cause genetic defects H350 May cause genetic defects H350 May cause genetic defects H360 May damage fertility or the unborn child	Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Carc. 1A Carc. 1B Carc. 2 Carcinogenicity Category 1B Carc. 2 Comb. Dust Comb. Dust Comb. Dust Eye Irrit. 2A Flam. Liq. 2 Flammable liquids Category 2 Flam. Sol. 2 Flam. Sol. 2 Flam. Sol. 2 Flam. B Reproductive Category 1B Repr. 1B Reproductive Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 1B Skin Irrit. 2 Skin Sens. 1 Specific target organ toxicity (repeated exposure) Category 1 STOT RE 1 Specific target organ toxicity (single exposure) Category 3 Flammable solid Ha302 Harmful if swallowed H304 May be fatal if swallowed H315 Causes skin irritation H335 May cause an allergic skin reaction May cause genetic defects H350 May cause genetic defects H360 May damage fertility or the unborn child	Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Carc. 1B Carcinogenicity Category 1B Carc. 2 Carcinogenicity Category 2 Comb. Dust Combustible Dust Eye Irrit. 2A Serious eye damage/eye irritation Category 2A Flam. Liq. 2 Flammable solids Category 2 Flam. Sol. 2 Muta. 1B Germ cell mutagenicity Category 1B Repr. 1B Repr. 1B Reproductive toxicity Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 2 Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable liquid and vapor H228 Flammable solid H300 Harmful if swallowed H304 May be fatal if swallowed H312 Harmful in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause greenic defects H350 May cause genetic defects H351 Suspected of causing cancer H351 Suspected of causing cancer	Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2 Comb. Dust Combustible Dust Eye Irrit. 2A Serious eye damage/eye irritation Category 2A Flam. Liq. 2 Flammable liquids Category 2 Flam. Sol. 2 Flammable solids Category 2 Flam. Sol. 2 Flammable solids Category 1 Flammable solids Category 1B Repr. 1B Repr. 1B Reproductive toxicity Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 2 Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May damage fertility or the unborn child	Carc. 1A	Carcinogenicity Category 1A
Comb. Dust  Eye Irrit. 2A  Serious eye damage/eye irritation Category 2A  Flam. Liq. 2  Flam. Sol. 2  Flammable liquids Category 2  Muta. 1B  Germ cell mutagenicity Category 1B  Repr. 1B  Skin Irrit. 2  Skin corrosion/irritation Category 2  Skin Sens. 1  Skin sensitization, Category 1  STOT RE 1  Specific target organ toxicity (repeated exposure) Category 3  STOT SE 3  Specific target organ toxicity (single exposure) Category 3  STOT SE 3  Specific target organ toxicity (single exposure) Category 3  Highly flammable liquid and vapor  Hazes  Flammable solid  Harmful if swallowed  Ha304  May be fatal if swallowed  Ha304  Harmful in contact with skin  H315  Causes skin irritation  H317  May cause an allergic skin reaction  H338  May cause respiratory irritation  H339  May cause respiratory irritation  H336  May cause drowsiness or dizziness  H340  May cause genetic defects  H350  May cause genetic defects  H351  Suspected of causing cancer  H351  Suspected of causing cancer  H351  May damage fertility or the unborn child	Carc. 1B	Carcinogenicity Category 1B
Eye Irrit. 2A  Serious eye damage/eye irritation Category 2A  Flam. Liq. 2  Flammable liquids Category 2  Flam. Sol. 2  Flammable solids Category 2  Muta. 1B  Repr. 1B  Reproductive toxicity Category 1B  Skin Irrit. 2  Skin corrosion/irritation Category 2  Skin Sens. 1  Skin sensitization, Category 1  STOT RE 1  Specific target organ toxicity (repeated exposure) Category 1  STOT SE 3  Specific target organ toxicity (single exposure) Category 3  STOT SE 3  Highly flammable liquid and vapor  H228  Hammable solid  H302  Harmful if swallowed  H304  May be fatal if swallowed  H315  Causes skin irritation  H317  May cause an allergic skin reaction  H319  Causes serious eye irritation  H336  May cause drowsiness or dizziness  H340  May cause genetic defects  H350  May cause genetic defects  H351  Suspected of causing cancer  H351  Suspected of causing cancer  H360  May damage fertility or the unborn child	Carc. 2	Carcinogenicity Category 2
Flam. Liq. 2 Flam. Sol. 3 Form cell mutagenicity Category 1B Flam. Sol. 3 Form cell mutagenicity Category 2 Flam. Sol. 3 Form cell mutagenicity Category 2 Flam. Sol. 3 Form cell mutagenicity Category 1 Flam. Sol. 3 Form cell mutagenicity Category 1 Flam. Sol. 3 Form cell mutagenicity Category 1 Flam. Sol. 4 Flam. Sol. 5 Flam. Sol. 5 Flam. Sol. 5 Flam. Sol. 5 Flam. Sol. 6 Flam. Sol.	Comb. Dust	Combustible Dust
Flam. Sol. 2  Muta. 1B  Germ cell mutagenicity Category 1B  Repr. 1B  Repr. 1B  Reproductive toxicity Category 1B  Skin Irrit. 2  Skin corrosion/irritation Category 2  Skin Sens. 1  Skin sensitization, Category 1  STOT RE 1  Specific target organ toxicity (repeated exposure) Category 1  STOT SE 3  Specific target organ toxicity (single exposure) Category 3  STOT SE 3  Specific target organ toxicity (single exposure) Category 3  Highly flammable liquid and vapor  H228  Highly flammable solid  H302  Harmful if swallowed  H304  May be fatal if swallowed and enters airways  H312  Harmful in contact with skin  Causes skin irritation  H317  May cause an allergic skin reaction  H319  Causes serious eye irritation  H335  May cause respiratory irritation  H336  May cause drowsiness or dizziness  H340  May cause genetic defects  H350  May damage fertility or the unborn child	Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Muta. 1BGerm cell mutagenicity Category 1BRepr. 1BReproductive toxicity Category 1BSkin Irrit. 2Skin corrosion/irritation Category 2Skin Sens. 1Skin sensitization, Category 1STOT RE 1Specific target organ toxicity (repeated exposure) Category 1STOT SE 3Specific target organ toxicity (single exposure) Category 3STOT SE 3Specific target organ toxicity (single exposure) Category 3H225Highly flammable liquid and vaporH228Flammable solidH302Harmful if swallowedH304May be fatal if swallowed and enters airwaysH312Harmful in contact with skinH315Causes skin irritationH317May cause an allergic skin reactionH319Causes serious eye irritationH335May cause respiratory irritationH336May cause drowsiness or dizzinessH340May cause genetic defectsH350May cause cancerH351Suspected of causing cancerH360May damage fertility or the unborn child	Flam. Liq. 2	Flammable liquids Category 2
Repr. 1B Reproductive toxicity Category 1B Skin Irrit. 2 Skin corrosion/irritation Category 2 Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	Flam. Sol. 2	Flammable solids Category 2
Skin Irrit. 2 Skin corrosion/irritation Category 2 Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed H312 Harmful in contact with skin Causes skin irritation H315 Causes skin irritation H317 May cause an allergic skin reaction Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	Muta. 1B	Germ cell mutagenicity Category 1B
Skin Sens. 1 Skin sensitization, Category 1 STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	Repr. 1B	Reproductive toxicity Category 1B
STOT RE 1 Specific target organ toxicity (repeated exposure) Category 1 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3 Specific target organ toxicity (single exposure) Category 3 STOT SE 3 Specific target organ toxicity (single exposure) Category 3 H225 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin Causes skin irritation H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	Skin Sens. 1	Skin sensitization, Category 1
STOT SE 3 Specific target organ toxicity (single exposure) Category 3 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin Causes skin irritation H315 Causes skin irritation H319 Causes serious eye irritation H335 May cause an allergic skin reaction Causes serious eye irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
H225 Highly flammable liquid and vapor H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H228 Flammable solid H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H302 Harmful if swallowed H304 May be fatal if swallowed and enters airways H312 Harmful in contact with skin H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H225	
H304May be fatal if swallowed and enters airwaysH312Harmful in contact with skinH315Causes skin irritationH317May cause an allergic skin reactionH319Causes serious eye irritationH335May cause respiratory irritationH336May cause drowsiness or dizzinessH340May cause genetic defectsH350May cause cancerH351Suspected of causing cancerH360May damage fertility or the unborn child	H228	Flammable solid
H312 Harmful in contact with skin  H315 Causes skin irritation  H317 May cause an allergic skin reaction  H319 Causes serious eye irritation  H335 May cause respiratory irritation  H336 May cause drowsiness or dizziness  H340 May cause genetic defects  H350 May cause cancer  H351 Suspected of causing cancer  H360 May damage fertility or the unborn child	H302	Harmful if swallowed
H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H304	May be fatal if swallowed and enters airways
H317May cause an allergic skin reactionH319Causes serious eye irritationH335May cause respiratory irritationH336May cause drowsiness or dizzinessH340May cause genetic defectsH350May cause cancerH351Suspected of causing cancerH360May damage fertility or the unborn child	H312	Harmful in contact with skin
H319 Causes serious eye irritation H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H315	Causes skin irritation
H335 May cause respiratory irritation H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H317	May cause an allergic skin reaction
H336 May cause drowsiness or dizziness H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H319	Causes serious eye irritation
H340 May cause genetic defects H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H335	May cause respiratory irritation
H350 May cause cancer H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H336	May cause drowsiness or dizziness
H351 Suspected of causing cancer H360 May damage fertility or the unborn child	H340	May cause genetic defects
H360 May damage fertility or the unborn child	H350	May cause cancer
	H351	·
H372 Causes damage to organs through prolonged or repeated exposure		
	H372	Causes damage to organs through prolonged or repeated exposure

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H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very 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)

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