Pipeline Interface or Transmix

Safety Data Sheet

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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1. Product Identifier

Product Name: Pipeline Interface or Transmix

Other means of identification: This Safety Data Sheet represents the composite characteristics and properties of fungible petroleum hydrocarbons and other related substances transported by refined petroleum products pipelines. Transmix is the trade/industry name for mixtures of refined petroleum products in unknown concentrations.

1.2. Intended Use of the Product

Use of the substance/mixture: Mixtures of refined petroleum products in varying concentrations

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

Company

Buckeye Energy Services, LLC
One Greenway Plaza
Suite 600
Houston, TX 77046
1-800-523-9420
http://www.buckeyeenergyservices.com

1.4. Emergency Telephone Number

Emergency Number : 800-424-9300
For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Flam. Liq. 1	H224
Acute Tox. 4 (Oral)	H302
Skin Irrit. 2	H315
Eye Irrit. 2A	H319
Muta. 1B	H340
Carc. 1A	H350
Repr. 2	H361
STOT SE 3	H336
STOT RE 1	H372
Asp. Tox. 1	H304

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS02 GHS07 GHS08

Signal Word (GHS-US) : Danger

Hazard Statements (GHS-US) : H224 - Extremely flammable liquid and vapor
H302 - Harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness
H340 - May cause genetic defects
H350 - May cause cancer (Inhalation)
H361 - Suspected of damaging fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure

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, open flames, sparks. - No smoking

P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe mist, spray, vapors
P261 - Avoid breathing mist, spray, vapors
P264 - Wash hands, forearms, and exposed areas thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear eye protection, protective clothing, protective gloves
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention
P312 - Call a POISON CENTER or doctor if you feel unwell
P321 - Specific treatment (see Section 4)
P330 - If swallowed, rinse mouth
P331 - If swallowed, do NOT induce vomiting
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing
P370+P378 - In case of fire: Use appropriate media for extinction
P391 - Collect spillage
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P235 - Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to local, regional, national, and international regulations

2.3. Other Hazards

Other Hazards Not Contributing to the Classification:
Hazardous to the aquatic environment - Acute Hazard Category 1.
Hazardous to the aquatic environment - Chronic Hazard Category 1.

Aquatic Acute 1 H400
Aquatic Chronic 1 H410

2.4. Unknown Acute Toxicity (GHS-US)

Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	Classification (GHS-US)
Fuels, diesel, no. 2	(CAS No) 68476-34-6	0.1 - 99	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315

			Carc. 2, H351 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 3, H402 Aquatic Chronic 2, H411
Kerosine, petroleum	(CAS No) 8008-20-6	0.1 - 99	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Gasoline, motor fuel	(CAS No) 86290-81-5	0.1 - 99	Muta. 1B, H340 Carc. 1B, H350 Asp. Tox. 1, H304
Toluene	(CAS No) 108-88-3	0.1 - 30	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Xylenes (o-, m-, p- isomers)	(CAS No) 1330-20-7	0.1 - 25	Flam. Liq. 3, H226 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
3-Methylpentane	(CAS No) 96-14-0	5 - 25	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Octane	(CAS No) 111-65-9	0.1 - 18.5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Butane	(CAS No) 106-97-8	0.1 - 12	Simple Asphy, H380 Flam. Gas 1, H220 Liquefied gas, H280
Pentane	(CAS No) 109-66-0	0.1 - 10	Flam. Liq. 1, H224 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Ethyl alcohol	(CAS No) 64-17-5	0.1 - 10	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 Aquatic Acute 2, H401
Benzene, 1,2,4-trimethyl-	(CAS No) 95-63-6	0.1 - 6	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Eye Irrit. 2A, H319

			Carc. 2, H351 STOT SE 3, H335 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
Ethylbenzene	(CAS No) 100-41-4	0.1 - 5	Flam. Liq. 2, H225 Acute Tox. 4 (Inhalation:vapour), H332 Muta. 1B, H340 Carc. 1A, H350 STOT RE 2, H373 Aquatic Acute 2, H401
Hexane	(CAS No) 110-54-3	0.1 - 5	Flam. Liq. 2, H225 Acute Tox. Not classified (Dermal) Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
n-Heptane	(CAS No) 142-82-5	0.1 - 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Cumene	(CAS No) 98-82-8	0.1 - 5	Flam. Liq. 3, H226 Carc. 2, H351 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
2,2,4-Trimethylpentane	(CAS No) 540-84-1	0.1 - 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Benzene	(CAS No) 71-43-2	0.1 - 4.9	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Acute 2, H401
Naphthalene	(CAS No) 91-20-3	0.1 - 3	Acute Tox. 4 (Oral), H302 Carc. 2, H351 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Cyclohexane	(CAS No) 110-82-7	0.1 - 3	Flam. Liq. 2, H225 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Nonane	(CAS No) 111-84-2	0.1 - 3	Flam. Liq. 3, H226

			Skin Irrit. 2, H315 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Methyl tert-butyl ether	(CAS No) 1634-04-4	0.1 - 1	Flam. Liq. 2, H225 Acute Tox. Not classified (Oral) Acute Tox. Not classified (Dermal) Acute Tox. Not classified (Inhalation:dust,mist) Skin Irrit. 2, H315 Asp. Tox. 1, H304
Phenol	(CAS No) 108-95-2	0.1 - 1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation:gas), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Muta. 2, H341 STOT RE 2, H373 Aquatic Acute 1, H400
Styrene	(CAS No) 100-42-5	0.1 - 1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335 STOT RE 1, H372 Asp. Tox. 1, H304
Cresol, all isomers	(CAS No) 1319-77-3	0.1 - 1	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Aquatic Acute 2, H401

Full text of H-phrases: see section 16

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). IF exposed or concerned: Get medical advice/attention.

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Causes skin irritation. Causes eye irritation. Harmful if swallowed.

Symptoms/Injuries After Inhalation: May cause drowsiness or dizziness.

Symptoms/Injuries After Skin Contact: Causes skin irritation.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Aspiration into the lungs can cause severe pulmonary edema/hemorrhage. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Chronic Symptoms: May cause cancer by inhalation. Causes damage to organs through prolonged or repeated exposure. May damage fertility. May damage the unborn child. May cause heritable genetic damage.

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

If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet to extinguish. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable/explosive vapor-air mixture.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Firefighting Instructions: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid breathing (dust, vapor, mist, gas). Use only outdoors or in a well-ventilated area. Do not allow product to spread into the environment.

6.1.1. For Non-emergency Personnel

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

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

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

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material.

Methods for Cleaning Up: Collect spillage. Clear up spills immediately and dispose of waste safely.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Do not breathe mist, spray, vapours. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take precautionary measures against static discharge. Use only non-sparking tools. Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical, lighting, ventilating equipment.

Storage Conditions: Store in a well-ventilated place. Keep container tightly closed.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

Incompatible Materials: Heat sources.

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

7.3. Specific End Use(s) No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Fuels, diesel, no. 2 (68476-34-6)		
USA ACGIH	ACGIH TWA (mg/m³)	100 mg/m³

Kerosine, petroleum (8008-20-6)		
USA ACGIH	ACGIH TWA (mg/m³)	200 mg/m³ (application restricted to conditions in which there are negligible aerosol exposures)
USA NIOSH	NIOSH REL (TWA) (mg/m³)	100 mg/m³

Butane (106-97-8)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	800 ppm

Toluene (108-88-3)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	375 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	560 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
USA IDLH	US IDLH (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm

Xylenes (o-, m-, p- isomers) (1330-20-7)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH STEL (ppm)	150 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	435 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm

Pentane (109-66-0)		
USA ACGIH	ACGIH TWA (ppm)	600 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	350 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	120 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	1800 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	610 ppm
USA IDLH	US IDLH (ppm)	1500 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	2950 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Naphthalene (91-20-3)		
USA ACGIH	ACGIH TWA (ppm)	10 ppm
USA ACGIH	ACGIH STEL (ppm)	15 ppm
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

Gasoline, motor fuel (86290-81-5)		
USA ACGIH	ACGIH TWA (ppm)	300 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm

Benzene (71-43-2)		
USA ACGIH	ACGIH TWA (ppm)	0.5 ppm
USA ACGIH	ACGIH STEL (ppm)	2.5 ppm
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)	1 ppm
USA OSHA	OSHA PEL (STEL) (ppm)	5 ppm (see 29 CFR 1910.1028)
USA OSHA	OSHA PEL (Ceiling) (ppm)	25 ppm

Ethyl alcohol (64-17-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm

Ethylbenzene (100-41-4)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	435 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	545 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	125 ppm
USA IDLH	US IDLH (ppm)	800 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	435 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm

Hexane (110-54-3)		
USA ACGIH	ACGIH TWA (ppm)	50 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	180 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	50 ppm
USA IDLH	US IDLH (ppm)	1100 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	1800 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm

n-Heptane (142-82-5)		
USA ACGIH	ACGIH TWA (ppm)	400 ppm
USA ACGIH	ACGIH STEL (ppm)	500 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	350 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	85 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	1800 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	440 ppm
USA IDLH	US IDLH (ppm)	750 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	2000 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm

Cyclohexane (110-82-7)		
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1050 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	300 ppm
USA IDLH	US IDLH (ppm)	1300 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	1050 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	300 ppm

Methyl tert-butyl ether (1634-04-4)		
USA ACGIH	ACGIH TWA (ppm)	50 ppm

Benzene, 1,2,4-trimethyl- (95-63-6)		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	125 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	25 ppm

Phenol (108-95-2)		
USA ACGIH	ACGIH TWA (ppm)	5 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	19 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	60 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	15.6 ppm
USA IDLH	US IDLH (ppm)	250 ppm
USA OSHA	OSHA PEL (TWA) (mg/m³)	19 mg/m³

USA OSHA	OSHA PEL (TWA) (ppm)	5 ppm

Styrene (100-42-5)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA ACGIH	ACGIH STEL (ppm)	40 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	215 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	50 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	425 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	100 ppm
USA IDLH	US IDLH (ppm)	700 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm

Nonane (111-84-2)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1050 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	200 ppm

Octane (111-65-9)		
USA ACGIH	ACGIH TWA (ppm)	300 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	350 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	75 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m³)	1800 mg/m³
USA NIOSH	NIOSH REL (ceiling) (ppm)	385 ppm
USA IDLH	US IDLH (ppm)	1000 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	2350 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	500 ppm

Cumene (98-82-8)		
USA ACGIH	ACGIH TWA (ppm)	50 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	245 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	50 ppm
USA IDLH	US IDLH (ppm)	900 ppm (10% LEL)
USA OSHA	OSHA PEL (TWA) (mg/m³)	245 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	50 ppm

Cresol, all isomers (1319-77-3)		
USA ACGIH	ACGIH TWA (mg/m³)	20 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	22 mg/m³
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. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Take precautionary measures against static discharges. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases/vapours may be released. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment : Gloves. Gas mask. Full protective flameproof clothing. Protective goggles.

Materials for Protective Clothing : Chemically resistant materials and fabrics.

Hand Protection : Wear chemically resistant protective gloves.

Eye Protection : Chemical goggles or safety glasses.

Skin and Body Protection : Wear suitable protective clothing.

Respiratory Protection : When manufacturing or handling product in large quantities and vapors or mists may be generated, maintain airborne concentrations below recommended limits. Workplace risk assessments should be completed before specifying and implementing respirator usage. NIOSH approved respirators for protection should be used if respirators are found to be necessary.

Thermal Hazard Protection : Wear suitable protective clothing.

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 : Clear. Pink. Bronze.

Color : Amber to black

Odor : Sour hydrocarbon.

Odor Threshold : No data available

pH : No data available

Relative Evaporation Rate (butylacetate=1) : <1

Melting Point : No data available

Freezing Point : No data available

Boiling Point : 80 to 680 °C

Flash Point : -40 °C (-40°F)

Auto-ignition Temperature : 257.22 to 260 °C

Decomposition Temperature : No data available

Flammability (solid, gas) : No data available

Vapor Pressure : 26.7 to 93.3 kPa

Relative Vapor Density at 20 °C : No data available

Relative Density : 0.6 - 0.87

Specific Gravity : 0.85

Solubility : Slightly soluble in water.

Log Pow : No data available

Log Kow : No data available

Viscosity, Kinematic : No data available

Viscosity, Dynamic : No data available

Explosive Properties : No data available

Oxidizing Properties : No data available

Explosive Limits : Lower: 1.4% Upper: 7.4%

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: Highly flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

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

10.4 Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5 Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous Decomposition Products: May release flammable gases. Under fire conditions this material may produce hazardous carbon dioxide (CO2), carbon monoxide (CO), various low molecular weight hydrocarbons, and smoke.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity : Harmful if swallowed.

Fuels, diesel, no. 2 (68476-34-6)	
ATE (Vapors)	11.000 mg/l/4h

Kerosine, petroleum (8008-20-6)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat (mg/l)	> 5.28 mg/l/4h

Butane (106-97-8)	
LC50 Inhalation Rat (mg/l)	30957 mg/m³ (Exposure time: 4 h)

Toluene (108-88-3)	
ATE (Oral)	636.000 mg/kg body weight
ATE (Dermal)	8390.000 mg/kg body weight
ATE (Dust/Mist)	12.500 mg/l/4h

Xylenes (o-, m-, p- isomers) (1330-20-7)	
LD50 Oral Rat	4300 mg/kg
LC50 Inhalation Rat (mg/l)	47635 mg/l/4h (Exposure time: 4 h)
LC50 Inhalation Rat (ppm)	6247 ppm/4h (species: Sprague-Dawley)
ATE (Dermal)	1100.000 mg/kg body weight
ATE (Vapors)	11.000 mg/l/4h

Pentane (109-66-0)	
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat (mg/l)	364 g/m³ (Exposure time: 4 h)

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

Gasoline, motor fuel (86290-81-5)	
LD50 Oral Rat	14000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat (mg/l)	> 5.2 mg/l/4h

Benzene (71-43-2)	
LC50 Inhalation Rat (ppm)	13050 - 14380 ppm/4h
ATE (Oral)	1800.000 mg/kg

Ethyl alcohol (64-17-5)	
LC50 Inhalation Rat (mg/l)	124.7 mg/l/4h

Ethylbenzene (100-41-4)	
LD50 Oral Rat	3500 mg/kg
LD50 Dermal Rabbit	15354 mg/kg
LC50 Inhalation Rat (mg/l)	17.2 mg/l/4h (Exposure time: 4 h)

Hexane (110-54-3)	
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat (ppm)	48000 ppm/4h
ATE (Oral)	25000.000 mg/kg

n-Heptane (142-82-5)	
LD50 Dermal Rabbit	3000 mg/kg
LC50 Inhalation Rat (mg/l)	103 g/m³ (Exposure time: 4 h)

Cyclohexane (110-82-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat (mg/l)	13.9 mg/l/4h

Methyl tert-butyl ether (1634-04-4)	
LD50 Oral Rat	4 g/kg
LD50 Dermal Rabbit	> 10000 mg/kg
LC50 Inhalation Rat (ppm)	23576 ppm/4h

Benzene, 1,2,4-trimethyl- (95-63-6)	
LD50 Oral Rat	6000 mg/kg
LD50 Dermal Rabbit	> 3160 mg/kg
LC50 Inhalation Rat (mg/l)	18 g/m³ (Exposure time: 4 h)
ATE (Vapors)	10.800 mg/l/4h

Phenol (108-95-2)	
LD50 Dermal Rabbit	630 mg/kg
LC50 Inhalation Rat (mg/l)	0.316 mg/l/4h (reported as 316 mg/m3/4h)
ATE (Oral)	100.000 mg/kg body weight
ATE (Gases)	700.000 ppmV/4h

Styrene (100-42-5)	
LC50 Inhalation Rat (mg/l)	11.8 mg/l/4h
ATE (Oral)	1000.000 mg/kg

Nonane (111-84-2)	
LC50 Inhalation Rat (ppm)	3200 ppm/4h

Octane (111-65-9)	
LC50 Inhalation Rat (mg/l)	118 g/m³ (Exposure time: 4 h)

Cumene (98-82-8)	
LD50 Oral Rat	2260 mg/kg
LD50 Dermal Rabbit	10000 mg/kg

2,2,4-Trimethylpentane (540-84-1)	
ATE (Dust/Mist)	47.400 mg/l/4h

Cresol, all isomers (1319-77-3)	
LD50 Oral Rat	1454 mg/kg
LD50 Dermal Rabbit	2000 mg/kg

Skin Corrosion/Irritation: Causes skin irritation.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: May cause genetic defects.

Carcinogenicity: May cause cancer (Inhalation).

Toluene (108-88-3)	
IARC group	3

Xylenes (o-, m-, p- isomers) (1330-20-7)	
IARC group	3

Naphthalene (91-20-3)	
IARC group	2B
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity, Reasonably anticipated to be Human Carcinogen.

Gasoline, motor fuel (86290-81-5)	
IARC group	2B

Benzene (71-43-2)	
IARC group	1
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity, Known Human Carcinogens.

Ethylbenzene (100-41-4)	
IARC group	2B
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity.

Methyl tert-butyl ether (1634-04-4)	
IARC group	3

Phenol (108-95-2)	
IARC group	3
National Toxicity Program (NTP) Status	Twelfth Report - Items under consideration.

Styrene (100-42-5)	
IARC group	2B
National Toxicity Program (NTP) Status	Reasonably anticipated to be Human Carcinogen.

Cumene (98-82-8)	
IARC group	2B
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity.

Cresol, all isomers (1319-77-3)	
National Toxicity Program (NTP) Status	Evidence of Carcinogenicity.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness or dizziness.

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

Aspiration Hazard: May be fatal if swallowed and enters airways.

Potential Adverse Human Health Effects and Symptoms: Toxic in contact with skin. Fatal if inhaled.

Symptoms/Injuries After Inhalation: May cause drowsiness or dizziness.

Symptoms/Injuries After Skin Contact: Causes skin irritation.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Aspiration into the lungs can cause severe pulmonary edema/hemorrhage. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Chronic Symptoms: May cause cancer by inhalation. Causes damage to organs through prolonged or repeated exposure. May damage fertility. May damage the unborn child. May cause heritable genetic damage.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

Fuels, diesel, no. 2 (68476-34-6)	
LC50 Fish 1	35 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

Toluene (108-88-3)	
LC50 Fish 1	15.22 - 19.05 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	5.46 - 9.83 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Other Aquatic Organisms 1	> 433 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
LC 50 Fish 2	12.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	11.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 2	12.5 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata [static])

Xylenes (o-, m-, p- isomers) (1330-20-7)	
LC50 Fish 1	13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	3.82 mg/l (Exposure time: 48 h - Species: water flea)
LC 50 Fish 2	2.661 (2.661 - 4.093) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 2	(Exposure time: 48 h - Species: Gammarus lacustris)

Pentane (109-66-0)	
LC50 Fish 1	9.87 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	9.74 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	11.59 mg/l (Exposure time: 96 h - Species: Pimephales promelas)

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)
LC 50 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])

Gasoline, motor fuel (86290-81-5)	
EC50 Other Aquatic Organisms 1	56 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)

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])
EC50 Other Aquatic Organisms 1	29 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
LC 50 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)

Ethyl alcohol (64-17-5)	
LC50 Fish 1	9.468 (9.468 - 12.624) mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) converted from ml/l
EC50 Daphnia 1	9268 (9268 - 14221) mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	2 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Ethylbenzene (100-41-4)	
LC50 Fish 1	11.0 - 18.0 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	1.8 - 2.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	4.6 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
LC 50 Fish 2	4.2 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [semi-static])
EC50 Other Aquatic Organisms 2	> 438 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)

Hexane (110-54-3)	
LC50 Fish 1	2.1 - 2.98 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

n-Heptane (142-82-5)	
LC50 Fish 1	375.0 mg/l (Exposure time: 96 h - Species: Cichlid fish)

Cyclohexane (110-82-7)	
LC50 Fish 1	3.96 - 5.18 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Other Aquatic Organisms 1	> 500 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
LC 50 Fish 2	23.03 - 42.07 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

Methyl tert-butyl ether (1634-04-4)	
LC50 Fish 1	672 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	542 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	> 800 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)
LC 50 Fish 2	929 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Other Aquatic Organisms 2	184 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)

Benzene, 1,2,4-trimethyl- (95-63-6)	
LC50 Fish 1	7.19 - 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna)

Phenol (108-95-2)	
LC50 Fish 1	11.9 - 50.5 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	4.24 - 10.7 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 Other Aquatic Organisms 1	46.42 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
LC 50 Fish 2	20.5 - 25.6 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 2	10.2 - 15.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 2	0.0188 - 0.1044 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata [static])

Styrene (100-42-5)	
LC50 Fish 1	3.24 - 4.99 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	3.3 - 7.4 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	1.4 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
LC 50 Fish 2	19.03 - 33.53 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Other Aquatic Organisms 2	0.72 mg/l (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata)
NOEC (acute)	44 mg/kg (Exposure time: 14 Days - Species: Eisenia foetida [soil dry weight])

Octane (111-65-9)	
EC50 Daphnia 1	0.38 mg/l (Exposure time: 48 h - Species: water flea)

Cumene (98-82-8)	
LC50 Fish 1	6.04 - 6.61 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

EC50 Daphnia 1	0.6 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	2.6 mg/l (Exposure time: 72 h - Species: Pseudokirchneriella subcapitata)
LC 50 Fish 2	4.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])
EC50 Daphnia 2	7.9 - 14.1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Cresol, all isomers (1319-77-3)	
LC50 Fish 1	12.8 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC 50 Fish 2	10 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

12.2. Persistence and Degradability

Pipeline Interface or Transmix	
Persistence and Degradability	Not established. May cause long-term adverse effects in the environment.

Ethyl alcohol (64-17-5)	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Pipeline Interface or Transmix	
Bioaccumulative Potential	Not established.

Butane (106-97-8)	
Log Pow	2.89

Toluene (108-88-3)	
Log Pow	2.65

Xylenes (o-, m-, p- isomers) (1330-20-7)	
BCF fish 1	0.6 (0.6 - 15)
Log Pow	2.77 - 3.15

Pentane (109-66-0)	
Log Pow	3.39

Naphthalene (91-20-3)	
BCF fish 1	30 - 430
Log Pow	3.3 (at 20 °C)

Benzene (71-43-2)	
BCF fish 1	3.5 - 4.4
Log Pow	1.83

Ethyl alcohol (64-17-5)	
Log Pow	-0.32
Bioaccumulative Potential	Not established.

Ethylbenzene (100-41-4)	
BCF fish 1	15
Log Pow	3.118

n-Heptane (142-82-5)	
Log Pow	4.66

Cyclohexane (110-82-7)	
Log Pow	3.44

Methyl tert-butyl ether (1634-04-4)	
BCF fish 1	(no bioaccumulation expected)
Log Pow	1.06 (at 23 °C)

Benzene, 1,2,4-trimethyl- (95-63-6)	
Log Pow	3.63

Phenol (108-95-2)	
BCF fish 1	(no significant bioaccumulation)
Log Pow	1.47

Styrene (100-42-5)	
BCF fish 1	13.5
Log Pow	2.95

Octane (111-65-9)	
Log Pow	5.18

Cumene (98-82-8)	
BCF fish 1	35.5
Log Pow	3.55 (at 23 °C)

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 waste material in accordance with all local, regional, national, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology – Waste Materials: Hazardous waste due to toxicity. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : PETROLEUM DISTILLATES, N.O.S.
Hazard Class : 3
Identification Number : UN1268
Label Codes : 3
Packing Group : I
ERG Number : 128

14.2 In Accordance with IMDG

Proper Shipping Name : PETROLEUM DISTILLATES, N.O.S.
Hazard Class : 3
Identification Number : UN1268
Packing Group : I
Label Codes : 3
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-E

14.3 In Accordance with IATA

Proper Shipping Name : PETROLEUM DISTILLATES, N.O.S.
Packing Group : I
Identification Number : UN1268
Hazard Class : 3
Label Codes : 3
ERG Code (IATA) : 3H

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Pipeline Interface or Transmix	
SARA Section 311/312 Hazard Classes	Fire hazard Delayed (chronic) health hazard Immediate (acute) health hazard

Fuels, diesel, no. 2 (68476-34-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Kerosine, petroleum (8008-20-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Butane (106-97-8)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Toluene (108-88-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	1000 lb
SARA Section 313 - Emission Reporting	1.0 %

Xylenes (o-, m-, p- isomers) (1330-20-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	100 lb
SARA Section 313 - Emission Reporting	1.0 %

Pentane (109-66-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

Naphthalene (91-20-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	100 lb
SARA Section 313 - Emission Reporting	0.1 %

Benzene (71-43-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	10 lb
SARA Section 313 - Emission Reporting	0.1 %

Ethyl alcohol (64-17-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Ethylbenzene (100-41-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	1000 lb
SARA Section 313 - Emission Reporting	0.1 %

Hexane (110-54-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %

n-Heptane (142-82-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.

Cyclohexane (110-82-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 %

Methyl tert-butyl ether (1634-04-4)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 %

Benzene, 1,2,4-trimethyl- (95-63-6)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %

Phenol (108-95-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 302 (Specific toxic chemical listings) Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 302 Threshold Planning Quantity (TPQ)	≤ 10000
SARA Section 313 - Emission Reporting	1.0 %

Styrene (100-42-5)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	0.1 %

Nonane (111-84-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Octane (111-65-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cumene (98-82-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a Section 4 test rule under TSCA.
SARA Section 313 - Emission Reporting	1.0 %

2,2,4-Trimethylpentane (540-84-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

3-Methylpentane (96-14-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Cresol, all isomers (1319-77-3)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
SARA Section 313 - Emission Reporting	1.0 %

15.2 US State Regulations

Toluene (108-88-3)	
U.S. - California - Proposition 65 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of California to cause birth defects.
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	WARNING: This product contains chemicals known to the State of California to cause (Female) reproductive harm.

Naphthalene (91-20-3)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Benzene (71-43-2)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

U.S. - California - Proposition 65 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of California to cause birth defects.
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	WARNING: This product contains chemicals known to the State of California to cause (Male) reproductive harm.

Ethyl alcohol (64-17-5)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.
U.S. - California - Proposition 65 - Developmental Toxicity	WARNING: This product contains chemicals known to the State of California to cause birth defects.

Ethylbenzene (100-41-4)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Cumene (98-82-8)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Fuels, diesel, no. 2 (68476-34-6)
U.S. - New Jersey - Right to Know Hazardous Substance List

Kerosine, petroleum (8008-20-6)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Butane (106-97-8)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Toluene (108-88-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Xylenes (o-, m-, p- isomers) (1330-20-7)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Pentane (109-66-0)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

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) List

Gasoline, motor fuel (86290-81-5)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
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) List

Ethyl alcohol (64-17-5)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List

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

Ethylbenzene (100-41-4)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Hexane (110-54-3)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

n-Heptane (142-82-5)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Cyclohexane (110-82-7)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Methyl tert-butyl ether (1634-04-4)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

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

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Phenol (108-95-2)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Styrene (100-42-5)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Nonane (111-84-2)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Octane (111-65-9)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Cumene (98-82-8)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

2,2,4-Trimethylpentane (540-84-1)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

3-Methylpentane (96-14-0)

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

Cresol, all isomers (1319-77-3)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION

Revision date : 12/30/2013

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. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhalation) Category 4
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Acute Tox. Not classified (Dermal)	Acute toxicity (dermal) Not classified
Acute Tox. Not classified (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Not classified
Acute Tox. Not classified (Oral)	Acute toxicity (oral) Not classified
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Asp. Tox. 1	Aspiration hazard Category 1
Carc. 1A	Carcinogenicity Category 1A
Carc. 1B	Carcinogenicity Category 1B
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Gas 1	Flammable gases Category 1
Flam. Liq. 1	Flammable liquids Category 1
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Liquefied gas	Gases under pressure Liquefied gas
Muta. 1B	Germ cell mutagenicity Category 1B
Muta. 2	Germ cell mutagenicity Category 2
Repr. 2	Reproductive toxicity Category 2
Simple Asphy	Simple Asphyxiant
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H220	Extremely flammable gas
H224	Extremely flammable liquid and vapor
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H227	Combustible liquid

H280	Contains gas under pressure; may explode if heated
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
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
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic 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) - US Only 10 pt 2