



Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

- **Delek Gasolines, All Grades Unleaded**

Synonyms

- Automobile Motor Fuels; Finished Gasolines; Gasoline; Leaded Regular; Unleaded 87 w/ethanol; Unleaded Midgrade-89; Unleaded Premium; Unleaded Premium-92; Unleaded Regular-87; Unleaded-89 w/ethanol

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Relevant identified use(s)**
- No data available

1.3 Details of the supplier of the safety data sheet

Manufacturer

- Delek Refining, Ltd.
425 McMurrey Drive
Tyler, TX 75702
United States
www.delekus.com

Telephone (General) • 903-579-3400

Telephone (General) • 903-579-3502 - Fax

1.4 Emergency telephone number

Manufacturer

- (800) 424-9300 - 24 Hour CHEMTREC - National

Manufacturer

- (703) 527-3887 - 24 Hour CHEMTREC - International

Section 2: Hazards Identification

EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]

According to: EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP

- Flammable Liquids 2 - H225
 - Aspiration 1 - H304
 - Skin Irritation 2 - H315
 - Skin Sensitization 1 - H317
 - Acute Toxicity Inhalation 4 - H332
 - Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects - H336
 - Germ Cell Mutagenicity 1B - H340
 - Carcinogenicity 1A - H350
 - Reproductive Toxicity 2 - H361fd
 - Specific Target Organ Toxicity Repeated Exposure 2 - H373
 - Hazardous to the aquatic environment Acute 1 - H400
 - Hazardous to the aquatic environment Chronic 1 - H410
- EUH066

DSD/DPD

- Highly Flammable (F)
 - Irritant (Xi)
 - Toxic (T)
 - Harmful (Xn)
 - Carcinogenic Substances - Category 1
 - Mutagenic Substances - Category 2
 - Substances Toxic To Reproduction - Category 3
 - Dangerous to the Environment (N)
- R11, R38, R43, R45, R46, R48/20/21/22, R50, R53, R62, R63, R65, R66, R67

2.2 Label Elements

CLP

DANGER



- Hazard statements •**
- H225 - Highly flammable liquid and vapour
 - H304 - May be fatal if swallowed and enters airways
 - H315 - Causes skin irritation
 - H317 - May cause an allergic skin reaction
 - H332 - Harmful if inhaled
 - H336 - May cause drowsiness or dizziness
 - H340 - May cause genetic defects.
 - H350 - May cause cancer.
 - H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child.
 - H373 - May cause damage to organs through prolonged or repeated exposure.
 - H400 - Very toxic to aquatic life
 - H410 - Very toxic to aquatic life with long lasting effects
 - EUH066 - Repeated exposure may cause skin dryness or cracking.

Precautionary statements

- Prevention •**
- P201 - Obtain special instructions before use.
 - P202 - Do not handle until all safety precautions have been read and understood.
 - P210 - Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
 - P233 - Keep container tightly closed.
 - P240 - Ground and/or bond container and receiving equipment.
 - P241 - Use explosion-proof electrical/ventilating/lighting/equipment.
 - P242 - Use only non-sparking tools.
 - P243 - Take precautionary measures against static discharge.
 - P260 - Do not breathe mists, vapours, and/or spray.
 - P264 - Wash thoroughly after handling.
 - P271 - Use only outdoors or in a well-ventilated area.
 - P272 - Contaminated work clothing should not be allowed out of the workplace.
 - P273 - Avoid release to the environment.
 - P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 - P281 - Use personal protective equipment as required.

- Response •**
- P370+P378 - In case of fire: Use appropriate media for extinction.
 - P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 - P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
 - P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 - P363 - Wash contaminated clothing before reuse.
 - P321 - Specific treatment, see supplemental first aid information.
 - P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
 - P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 - P331 - Do NOT induce vomiting.
 - P308+P313 - IF exposed or concerned: Get medical advice/attention.
 - P391 - Collect spillage.

- Storage/Disposal •**
- P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
 - P235 - Keep cool.

P405 - Store locked up.
P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Supplemental information • 9.1 - 39 percent of this product consists of an ingredient of unknown toxicity.
DSD/DPD



Risk phrases • R11 - Highly flammable.
R38 - Irritating to skin.
R43 - May cause sensitisation by skin contact.
R45 - May cause cancer.
R46 - May cause heritable genetic damage.
R48/20/21/22 - Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
R50 - Very toxic to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment.
R62 - Possible risk of impaired fertility.
R63 - Possible risk of harm to the unborn child.
R65 - Harmful: may cause lung damage if swallowed.
R66 - Repeated exposure may cause skin dryness or cracking.
R67 - Vapours may cause drowsiness and dizziness.

Safety phrases • S9 - Keep container in a well ventilated place
S16 - Keep away from sources of ignition - No Smoking.
S24 - Avoid contact with skin.
S36 - Wear suitable protective clothing.
S37 - Wear suitable gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53 - Avoid exposure - obtain special instructions before use.
S57 - Use appropriate containment to avoid environmental contamination.

2.3 Other Hazards

CLP

- According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

DSD/DPD

- According to European Directive 1999/45/EC this material is considered dangerous.

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012

- Flammable Liquids 2
Acute Toxicity Oral 4
Aspiration 1
Skin Irritation 2
Skin Sensitization 1
Eye Irritation 2
Acute Toxicity Inhalation 4
Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects
Germ Cell Mutagenicity 1B
Carcinogenicity 1A
Reproductive Toxicity 1B
Specific Target Organ Toxicity Repeated Exposure 1
Specific Target Organ Toxicity Repeated Exposure 2

2.2 Label elements

OSHA HCS 2012

DANGER



- Hazard statements** • Highly flammable liquid and vapour
Harmful if swallowed
May be fatal if swallowed and enters airways
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye irritation
Harmful if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
Causes damage to organs through prolonged or repeated exposure.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

- Prevention** • Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, sparks, open flames and/or hot surfaces. - No smoking.
Keep container tightly closed.
Ground and/or bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe mists, vapours, and/or spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves, clothing, and eye/face protection, .
- Response** • In case of fire: Use appropriate media for extinction.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Call a POISON CENTER or doctor/physician if you feel unwell.
If on skin: Wash with plenty of water .
Take off contaminated clothing and wash before reuse.
Specific treatment, see supplemental first aid information.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
Rinse mouth.
IF exposed or concerned: Get medical advice/attention.

- Storage/Disposal** • Store in a well-ventilated place. Keep container tightly closed.
Keep cool.
Store locked up.
Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

- Supplemental information** • This product consists of an ingredient of unknown toxicity via the oral route at 14.5 - 31.6 percent and via the inhalation route at 9.1 - 39 percent.

2.3 Other hazards

OSHA HCS 2012

- Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to: WHMIS

2.1 Classification of the substance or mixture

WHMIS

- Flammable Liquids - B2
Toxic - D1B
Other Toxic Effects - D2A
Other Toxic Effects - D2B

2.2 Label elements

WHMIS



- Flammable Liquids - B2
Toxic - D1B
Other Toxic Effects - D2A
Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

- In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

Section 3 - Composition/Information on Ingredients

3.1 Substances

3.2 Mixtures

Composition					
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments
Hexane	CAS:110-54-3 EC Number:203-777-6 EU Index:601-037-00-0	6% TO 23%	Ingestion/Oral-Rat LD50 • 25 g/kg Inhalation-Rat LC50 • 627000 mg/m ³ 3 Minute(s)	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Repr.Cat.3, R62; Xn, R48/20, R65; Xi, R38; R67; N, R51, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Repr. 2, H361f; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2; STOT SE 3: Narc. & Resp. Irrit.; Asp. Tox. 1; Repr. 2; STOT RE 2 (CNS, Nervous System)	NDA
Toluene	CAS:108-88-3 EC Number:203-625-9 EU Index:601-021-00-3	1% TO 20%	Ingestion/Oral-Rat LD50 • 636 mg/kg Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s) Skin-Rabbit LD50 • 14100 µL/kg	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Repr.Cat.3, R63; Xn, R48/20, R65; Xi, R38; R67 EU CLP: Skin Irrit. 2, H315; Asp. Tox. 1, H304; STOT RE 2, H373; STOT SE 3: Narc., H336; Flam. Liq. 2, H225; Repr. 2, H361d OSHA HCS 2012: Flam. Liq. 2; Acute Tox. 4 (Oral); Skin Irrit. 2; Eye Irrit. 2; Muta. 1B; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (CNS/Inh); Asp. Tox. 1	NDA

Pentane	CAS:109-66-0 EC Number:203-692-4 EU Index:601-006-00-1	5% TO 20%	Inhalation-Rat LC50 • 364 g/m ³ 4 Hour(s) Ingestion/Oral-Rat LD50 • >2000 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: F+, R12; Xn, R65; R66; R67; N, R51, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; STOT SE 3, H336; Aquatic Chronic 2, H411; EUH066 OSHA HCS 2012: Flam. Liq. 1; Asp. Tox. 1; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Narc.	NDA
Octane	CAS:111-65-9 EC Number:203-892-1 EU Index:601-009-00-8	5% TO 20%	Inhalation-Rat LC50 • 118 g/m ³ 4 Hour(s)	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Xn, R65; Xi, R38; R67; N, R50, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2; STOT SE 3: Narc.; Asp. Tox. 1	NDA
Xylene	CAS:1330-20-7 EC Number:215-535-7 EU Index:601-022-00-9	1% TO 18%	Ingestion/Oral-Rat LD50 • 4300 mg/kg Inhalation-Rat LC50 • 5000 ppm 4 Hour(s) Skin-Rabbit LD50 • >1700 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: R10; Xn, R20/21; Xi, R38 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit. 2, H315 OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (Inhl); Skin Irrit. 2; Eye Irrit. 2; Repr. 1B (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.	NDA
Heptane	CAS:142-82-5 EC Number:205-563-8 EU Index:601-008-00-2	5% TO 15%	Inhalation-Rat LC50 • 103 g/m ³ 4 Hour(s)	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Xn, R65; Xi, R38; R67; N, R50, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Liq. 2; Asp. Tox. 1; STOT SE 3: Narc.	NDA
Nonane	CAS:111-84-2 EC Number:203-913-4	0% TO 10%	Inhalation-Rat LC50 • 3200 ppm 4 Hour(s)	EU DSD/DPD: R10; Xn; R65; Xi; R38; R67 EU CLP: Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336 OSHA HCS 2012: Flam. Liq. 3; Asp. Tox. 1; Skin Irrit. 2; STOT SE 3: Narc.	NDA
Butane	CAS:106-97-8 EC Number:203-448-7	0% TO 10%	Inhalation-Rat LC50 • 658 g/m ³ 4 Hour(s)	EU DSD/DPD: F+, R12 EU CLP: Flam. Gas 1, H220; Press. Gas - Comp, H280 OSHA HCS 2012: Flam. Gas 1; Press. Gas; STOT SE 3: Narc.; Simp. Asphyx.	NDA
2-Methylbutane (In Liquid form)	CAS:78-78-4 EC Number:201-142-8 EU Index:601-085-00-2	0% TO 10%	Inhalation-Rat LC50 • 280000 mg/m ³ 4 Hour(s)	EU DSD/DPD: Annex VI, Table 3.2: F+; R12 N; R51-53 Xn; R65 R66 R67 EU CLP: Annex VI, Table 3.1: Flam. Liq. 1, H224; Asp. Tox. 1, H304; STOT SE 3, H336; Aquatic Chronic 2, H411; EUH066 OSHA HCS 2012: Flam. Liq. 1; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Resp. Irrit. & Narc.; Asp. Tox. 1	NDA
Methylcyclohexane	CAS:108-87-2 EC Number:203-624-3 EU Index:601-018-00-7	1% TO 5%	Ingestion/Oral-Rat LD50 • >3200 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Xn, R65; Xi, R38; R67; N, R51, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 2; Eye Irrit. 2; STOT SE 3: Narc.; Asp. Tox. 1	NDA

Benzene, trimethyl-	CAS:25551-13-7 EC Number:247-099-9	1% TO 5%	Ingestion/Oral-Rat LD50 • 8970 mg/kg	EU DSD/DPD: R10; Xi; R38; R67; Xn; R65; N; R51-53 EU CLP: Flam. Liq. 3, H226; Skin Irrit. 2, H315; STOT SE 3, H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 3; Eye Irrit. 2; Skin Irrit. 2; STOT SE 3: Narc.; Asp. Tox. 1	NDA
Benzene	CAS:71-43-2 EC Number:200-753-7 EU Index:601-020-00-8	0% TO 4.9%	Inhalation-Rat LC50 • 10000 ppm 7 Hour(s) Skin-Rabbit LD50 • >9400 µL/kg Ingestion/Oral-Rat LD50 • 1800 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Carc.Cat.1, R45; Muta.Cat.2, R46; T, R48/23/24/25; Xn, R65; Xi, R36/38 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Carc. 1A, H350; Muta. 1B, H340; STOT RE 1, H372; Asp. Tox. 1, H304; Eye Irrit. 2, H319; Skin Irrit. 2, H315 OSHA HCS 2012: Flam. Liq. 2; Acute Tox. 4 (Oral); Acute Tox. 4 (Inhalation); Skin Irrit. 2; Eye Irrit. 2; Muta. 1B (Oral, Inhalation); Carc. 1A (Inhalation); Repr. 2 (Inhalation); STOT SE 3: Narc. (Inhalation); STOT RE 1 (Blood, Bone marrow / Inhalation); Asp. Tox. 1	NDA
Ethylbenzene	CAS:100-41-4 EC Number:202-849-4 EU Index:601-023-00-4	0.2% TO 4%	Ingestion/Oral-Rat LD50 • 3500 mg/kg Inhalation-Rat LC50 • 55000 mg/m ³ 2 Hour(s) Skin-Rabbit LD50 • >5000 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Xn, R20, R48/20, R65 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Acute Tox. 4, H332; STOT RE 2, H373 (Hearing Organs); Asp. Tox. 1, H304 OSHA HCS 2012: Flam. Liq. 2; Acute Tox. 4 (Inhalation); Eye Irrit. 2; Carc. 2 (Inhalation); Repr. 2 (Inhalation)	NDA
1-Methylethylbenzene	CAS:98-82-8 EC Number:202-704-5 EU Index:601-024-00-X	0.5% TO 4%	Ingestion/Oral-Rat LD50 • 1400 mg/kg Skin-Rabbit LD50 • 12300 µL/kg Inhalation-Rat LC50 • 8000 ppm	EU DSD/DPD: Annex VI, Table 3.2: R10; Xn, R65; Xi, R37; N, R51, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (Oral); Skin Irrit. 2; Eye Irrit. 2; Carc. 2 (Inhl); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.; Asp. Tox. 1	NDA
Methylcyclopentane	CAS:96-37-7 EC Number:202-503-2	1% TO 3%	NDA	EU DSD/DPD: F, R11; Xn, R48/20; R67 EU CLP: Flam. Liq. 2, H225; STOT RE 2 (PNS), H373; STOT SE 3, H336 OSHA HCS 2012: Flam. Liq. 2; STOT SE 3: Narc.; STOT RE 2 (PNS)	NDA
Ethyl toluene	CAS:25550-14-5 EINECS:247-093-6	1% TO 3%	NDA	EU DSD/DPD: Not Classified EU CLP: Not Classified OSHA HCS 2012: Not Classified	NDA
Cyclohexane	CAS:110-82-7 EC Number:203-806-2 EU Index:601-017-00-1	0% TO 3%	Ingestion/Oral-Rat LD50 • 12705 mg/kg Skin-Rabbit LD50 • >2000 mg/kg	EU DSD/DPD: Annex VI, Table 3.2: F, R11; Xn, R65; Xi, R38; R67; N, R50, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Liq. 2; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3: Resp. Irrit. & Narc.; Asp. Tox 1	NDA
1-Hexene	CAS:592-41-6 EINECS:209-753-1	1% TO 3%	Inhalation-Rat LC50 • 32000 ppm 4 Hour(s)	EU DSD/DPD: F; R11; Xi; R36/38; Xn; R65; R67; R52-53 EU CLP: Flam. Liq. 2, H225; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Asp. Tox. 1, H304; STOT SE 3, H336; Aquatic Chronic 3, H412 OSHA HCS 2012: Flam Liq. 2; Eye Irrit. 2; STOT SE 3: Narc.; Asp. Tox 1; Skin Irrit. 2	NDA
				EU DSD/DPD: Annex VI, Table 3.2: Carc.Cat.3, R40;	

Naphthalene	CAS:91-20-3 EC Number:202-049-5 EU Index:601-052-00-2	0.1% TO 2%	Skin-Rabbit LD50 • >20 g/kg Ingestion/Oral-Rat LD50 • 490 mg/kg	Xn, R22; N, R50, R53 EU CLP: Annex VI, Table 3.1: Carc. 2, H351; Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 OSHA HCS 2012: Flam. Sol. 2; Acute Tox. 4 (Oral); Skin Irrit. 2; Muta. 2; Carc. 2; Repr. 2; STOT SE 3: Narc.; STOT RE 1 (Blood, Eyes - Oral, Inhl)	NDA
Cyclopentane	CAS:287-92-3 EC Number:206-016-6 EU Index:601-030-00-2	1% TO 2%	Ingestion/Oral-Rat LD50 • 11400 mg/kg Inhalation-Rat LC50 • 106000 mg/m ³	EU DSD/DPD: Annex VI, Table 3.2: F, R11; R52, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 2, H225; Aquatic Chronic 3, H412 OSHA HCS 2012: Flam Liq. 2; STOT SE 3: Narc.	NDA
Indene	CAS:95-13-6 EC Number:202-393-6	0.5% TO 1.5%	Inhalation-Rat LC50 • 14000 mg/m ³ 4 Hour(s)	EU DSD/DPD: R10; Xi R43 EU CLP: Flam. Liq. 3, H226; Skin Sens. 1, H317 OSHA HCS 2012: Flam. Liq. 3; Skin Sens. 1	NDA
Benzene, propyl-	CAS:103-65-1 EC Number:203-132-9 EU Index:601-024-00-X	0.5% TO 1.5%	Ingestion/Oral-Rat LD50 • 6040 mg/kg Inhalation-Rat LC50 • 65000 ppm 2 Hour(s)	EU DSD/DPD: Annex VI, Table 3.2: R10; Xn, R65; Xi, R37; N, R51, R53 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335; Aquatic Chronic 2, H411 OSHA HCS 2012: Flam. Liq. 3; Asp. Tox. 1; STOT SE 3: Narc.	NDA
Ethylbenzene	CAS:100-42-5 EC Number:202-851-5 EU Index:601-026-00-0	0% TO 1%	Ingestion/Oral-Rat LD50 • 2650 mg/kg Inhalation-Rat LC50 • 11800 mg/m ³ 4 Hour(s)	EU DSD/DPD: Annex VI, Table 3.2: Repr.Cat.3, R63; Xn, R20, R48/20; Xi, R36/38; R10 EU CLP: Annex VI, Table 3.1: Flam. Liq. 3, H226; Repr. 2, H361d; Acute Tox. 4 *, H332; STOT RE 1, H372 (Hearing Organs); Skin Irrit. 2, H315; Eye Irrit. 2, H319 OSHA HCS 2012: Flam. Liq. 3; Acute Tox. 4 (Inhalation); Skin Irrit. 2; Eye Irrit. 2; Muta. 2 (Inhalation); Carc. 2 (Inhalation); Repr. 2 (Inhalation); STOT SE 3: Narc.; STOT SE 3: Resp. Irrit.; Asp. Tox. 1	NDA

See Section 16 for full text of H-statements and R-phrases.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Seek medical attention.

Skin

- IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation occurs: Get medical advice/attention.

Eye

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Ingestion

- Do not induce vomiting or give anything by mouth because this material can enter the lungs and cause severe lung damage. If person is drowsy or unconscious and vomiting, place on the left side with the head down. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the

patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media • LARGE FIRE: Water spray, fog or regular foam.
SMALL FIRES: Dry chemical, CO₂, water spray, inert gas, or regular foam.

Unsuitable Extinguishing Media • No data available.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards • HIGHLY FLAMMABLE: Will be easily ignited by heat, sparks or flames. Containers may explode when heated. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapors may form explosive mixtures with air. Vapor explosion hazard indoors, outdoors or in sewers. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products • Carbon dioxide, carbon monoxide, smoke, fumes, unburned hydrocarbons, aldehydes and other products of incomplete combustion.

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Move containers from fire area if you can do it without risk.
FIRE: If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.
LARGE FIRES: Dike fire control water for later disposal; do not scatter the material.
FIRE INVOLVING TANKS AND CAR/TRAILER LOADS: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: Cool containers with flooding quantities of water until well after fire is out.
FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: ALWAYS stay away from tanks engulfed in fire.
FIRES INVOLVING TANKS OR CAR/TRAILER LOADS: For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions • Do not walk through spilled material. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Emergency Procedures • ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Stop leak if you can do it without risk. Ventilate closed spaces before entering.

6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Immediate clean-up of spill is recommended. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. **LARGE SPILLS:** Dike far ahead of liquid spill for later disposal. **LARGE SPILLS:** Water spray may reduce vapor; but may not prevent ignition in closed spaces.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

6.5 Other Information

- If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, notify the National Response Center (Phone number 800-424-8802)

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Empty containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. Keep away from heat, sparks, and flame – No Smoking. Bond and ground all equipment when transferring from one vessel to another. Product can accumulate static charge by flow or agitation. Do not enter confined spaces such as tanks or pits without following proper entry procedures. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe mist, vapours and/or spray. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in a cool/low-temperature, well-ventilated place away from heat and ignition sources. Store only in approved containers. Store locked up. Keep container tightly closed. Containers should be clearly labeled. Protect containers against physical damage. Keep away from incompatible materials. Keep away from fire.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines				
	Result	ACGIH	NIOSH	OSHA
Ethenylbenzene (100-42-5)	Ceilings	Not established	Not established	200 ppm Ceiling
	TWAs	20 ppm TWA	50 ppm TWA; 215 mg/m3 TWA	100 ppm TWA
	STELs	40 ppm STEL	100 ppm STEL; 425 mg/m3 STEL	Not established
Benzene (71-43-2)	Ceilings	Not established	Not established	25 ppm Ceiling
	STELs	2.5 ppm STEL	1 ppm STEL	5 ppm STEL (see 29 CFR 1910.1028)
				10 ppm TWA (applies to industry)

	TWAs	0.5 ppm TWA	0.1 ppm TWA	segments exempt from the benzene standard at 29 CFR 1910.1028); 1 ppm TWA
Cyclohexane (110-82-7)	TWAs	100 ppm TWA	300 ppm TWA; 1050 mg/m3 TWA	300 ppm TWA; 1050 mg/m3 TWA
Butane (106-97-8)	STELs	1000 ppm STEL	Not established	Not established
	TWAs	Not established	800 ppm TWA; 1900 mg/m3 TWA	Not established
Nonane (111-84-2)	TWAs	200 ppm TWA	200 ppm TWA; 1050 mg/m3 TWA	Not established
2-Methylbutane (In Liquid form) (78-78-4)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	Not established	Not established
Naphthalene (91-20-3)	TWAs	10 ppm TWA	10 ppm TWA; 50 mg/m3 TWA	10 ppm TWA; 50 mg/m3 TWA
	STELs	Not established	15 ppm STEL; 75 mg/m3 STEL	Not established
Ethylbenzene (100-41-4)	TWAs	20 ppm TWA	100 ppm TWA; 435 mg/m3 TWA	100 ppm TWA; 435 mg/m3 TWA
	STELs	Not established	125 ppm STEL; 545 mg/m3 STEL	Not established
1-Methylethylbenzene (98-82-8)	TWAs	50 ppm TWA	50 ppm TWA; 245 mg/m3 TWA	50 ppm TWA; 245 mg/m3 TWA
Indene (95-13-6)	TWAs	5 ppm TWA	10 ppm TWA; 45 mg/m3 TWA	Not established
Toluene (108-88-3)	Ceilings	Not established	Not established	300 ppm Ceiling
	TWAs	20 ppm TWA	100 ppm TWA; 375 mg/m3 TWA	200 ppm TWA
	STELs	Not established	150 ppm STEL; 560 mg/m3 STEL	Not established
Methylcyclohexane (108-87-2)	TWAs	400 ppm TWA	400 ppm TWA; 1600 mg/m3 TWA	500 ppm TWA; 2000 mg/m3 TWA
Xylene (1330-20-7)	TWAs	100 ppm TWA	Not established	100 ppm TWA; 435 mg/m3 TWA
	STELs	150 ppm STEL	Not established	Not established
Cyclopentane (287-92-3)	TWAs	600 ppm TWA	600 ppm TWA; 1720 mg/m3 TWA	Not established
1-Hexene (592-41-6)	TWAs	50 ppm TWA	Not established	Not established
Benzene, trimethyl- (25551-13-7)	TWAs	25 ppm TWA	Not established	Not established
Pentane (109-66-0)	TWAs	1000 ppm TWA (listed under Pentane, all isomers)	120 ppm TWA; 350 mg/m3 TWA	1000 ppm TWA; 2950 mg/m3 TWA
	Ceilings	Not established	610 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)	Not established
Octane (111-65-9)	TWAs	300 ppm TWA	75 ppm TWA; 350 mg/m3 TWA	500 ppm TWA; 2350 mg/m3 TWA
	Ceilings	Not established	385 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)	Not established
Heptane (142-82-5)	TWAs	400 ppm TWA (listed under Heptane, all isomers)	85 ppm TWA; 350 mg/m3 TWA	500 ppm TWA; 2000 mg/m3 TWA
	STELs	500 ppm STEL (listed under Heptane, all isomers)	Not established	Not established
	Ceilings	Not established	440 ppm Ceiling (15 min); 1800 mg/m3 Ceiling (15 min)	Not established
Hexane (110-54-3)	TWAs	50 ppm TWA	50 ppm TWA; 180 mg/m3 TWA	500 ppm TWA; 1800 mg/m3 TWA

8.2 Exposure controls

Engineering Measures/Controls

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash station and quick-drench shower facility should be available in the work area.

Personal Protective Equipment

Respiratory

- Use NIOSH approved respiratory protection (US requirements) Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.

Eye/Face

- Wear protective eyewear (goggles, face shield, or safety glasses).

Hands

- Chemical-resistant, impervious gloves should be when handling this product.

Skin/Body

- Avoid skin contact. Wear long-sleeved fire-retardant garments (e.g., Nomex®) while working with flammable and combustible liquids. Additional chemical-resistant protective gear may be required if splashing or spraying conditions exist. This may include an apron, boots and additional facial protection. If product comes in contact with clothing, immediately remove soaked clothing and shower. Promptly remove and discarded contaminated leather goods.

Environmental Exposure Controls

- Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

STEL = Short Term Exposure Limits are based on 15-minute exposures

MSHA = Mine Safety and Health Administration

STEV = Short Term Exposure Value

NIOSH = National Institute of Occupational Safety and Health

TWAEV = Time-Weighted Average Exposure Value

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Transparent, clear to amber or red liquid with pungent, characteristic gasoline odor.
Color	Transparent, clear to amber or red liquid.	Odor	characteristic gasoline.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	100 to 400 F(37.7778 to 204.4444 C)	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	0.72 to 0.77 Water=1	Density	6.0084 to 6.4257 lbs/gal
Water Solubility	Data lacking	Viscosity	0.35 to 1 Centistoke (cSt, cS) or mm ² /sec
Explosive Properties	Data lacking	Oxidizing Properties:	Data lacking
Volatility			
Vapor Pressure	220 to 450 mmHg (torr) @ 68 F(20 C)	Vapor Density	3 to 4 Air=1
Evaporation Rate	Data lacking	VOC (Vol.)	720 g/L
Flammability			

Flash Point	-45.4 F(-43 C) TCC (Tagliabue Closed Cup)	UEL	7.6 %
LEL	1.4 %	Autoignition	536 F(280 C)
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures. Vapor can cause flash fire.

10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

10.4 Conditions to avoid

- Sources of ignition. Incompatible materials.

10.5 Incompatible materials

- Strong acids, alkalis, and oxidizers such as liquid chlorine and oxygen. If uninhibited, gasoline will cause rusting of copper and alloys containing copper.

10.6 Hazardous decomposition products

- Excess heating and/or incomplete combustion may produce smoke, carbon monoxide, carbon dioxide, and other harmful gases or vapors.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Octane (5% TO 20%)	111-65-9	Acute Toxicity: Inhalation-Rat LC50 • 118 g/m ³ 4 Hour(s); Inhalation-Rat LC50 • 25260 ppm 4 Hour(s)
Pentane (5% TO 20%)	109-66-0	Acute Toxicity: Ingestion/Oral-Rat LD50 • >2000 mg/kg; Inhalation-Rat LC50 • 364 g/m ³ 4 Hour(s)
Toluene (1% TO 20%)	108-88-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 636 mg/kg; Inhalation-Rat LC50 • 49 g/m ³ 4 Hour(s); Inhalation-Human TCLo • 200 ppm; <i>Brain and Coverings:Recordings from specific areas of CNS; Behavioral:Antipsychotic; Blood:Changes in bone marrow not included above; Inhalation-Human TCLo • 1500 mg/m³ 8 Hour(s); Sense Organs and Special Senses:Eye:Lacrimation; Sense Organs and Special Senses:Eye:Conjunctive irritation; Behavioral:Ataxia; Inhalation-Man TCLo • 50 ppm; Kidney, Ureter, and Bladder:Other changes in urine composition; Skin-Rabbit LD50 • 14100 µL/kg; Irritation: Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TCLo • 250 ppm 4 Day(s)-Continuous; Behavioral:Convulsions or effect on seizure threshold; Behavioral:Abuse; Inhalation-Mouse TCLo • 50 ppm 12 Week(s)-Intermittent; Brain and Coverings:Other degenerative changes; Inhalation-Rat TCLo • 10 ppm 6 Hour(s) 13 Week(s)-Intermittent; Brain and Coverings:Other degenerative changes; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Multiple enzyme effects; Mutagen: Micronucleus test • Ingestion/Oral-Mouse • 200 mg/kg; Sister chromatid exchange • Inhalation-Human • 252 µg/L 19 Year(s); Cytogenetic analysis • Inhalation-Rat • 5400 µg/m³ 16 Week(s)-Intermittent;</i>

		Reproductive: Inhalation-Mouse TCLo • 500 mg/m ³ 24 Hour(s)(6-13D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Inhalation-Mouse TCLo • 200 ppm 7 Hour (s)(7-16D preg); Reproductive Effects:Specific Developmental Abnormalities:Urogenital system
Xylene (1% TO 18%)	1330-20-7	Acute Toxicity: Ingestion/Oral-Rat LD50 • 4300 mg/kg; Liver:Other changes; Kidney, Ureter, and Bladder:Other changes; Inhalation-Rat LC50 • 5000 ppm 4 Hour(s); Inhalation-Man LCLo • 10000 ppm 6 Hour(s); Behavioral:General anesthetic; Lungs, Thorax, or Respiration:Cyanosis; Blood:Other changes; Inhalation-Human TCLo • 200 ppm; Sense Organs and Special Senses:Olfaction:Other changes; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Other changes; Skin-Rabbit LD50 • >1700 mg/kg; Irritation: Eye-Rabbit • 5 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Reproductive: Inhalation-Rabbit TCLo • 1 g/m ³ 24 Hour(s)(7-20D preg); Reproductive Effects:Effects on Fertility:Abortion; Inhalation-Rat TCLo • 50 mg/m ³ 6 Hour(s)(1-21D preg); Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Craniofacial (including nose and tongue); Inhalation-Rat TDLo • 200 ppm 6 Hour(s)(4-20D preg); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Reproductive Effects:Effects on Newborn:Behavioral
Heptane (5% TO 15%)	142-82-5	Acute Toxicity: Inhalation-Rat LC50 • 103 g/m ³ 4 Hour(s)
Hexane (6% TO 23%)	110-54-3	Acute Toxicity: Ingestion/Oral-Rat LD50 • 25 g/kg; Inhalation-Rat LC50 • 48000 ppm 4 Hour(s); Irritation: Eye-Rabbit • 10 mg • Mild irritation; Reproductive: Inhalation-Rat TCLo • 5000 ppm (6-19D preg); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Reproductive Effects:Specific Developmental Abnormalities:Urogenital system
2-Methylbutane (In Liquid form) (0% TO 10%)	78-78-4	Acute Toxicity: Inhalation-Rat LC50 • 280000 mg/m ³ 4 Hour(s)
Butane (0% TO 10%)	106-97-8	Acute Toxicity: Inhalation-Mouse LC50 • 680000 mg/m ³ 2 Hour(s)
Nonane (0% TO 10%)	111-84-2	Acute Toxicity: Inhalation-Rat LC50 • 3200 ppm 4 Hour(s); Inhalation-Rat LC50 • 17000 mg/m ³ 4 Hour(s); Irritation: Skin-Rat • 300 µL 4 Day(s)-Open • Moderate irritation
Benzene, trimethyl-(1% TO 5%)	25551-13-7	Acute Toxicity: Ingestion/Oral-Rat LD50 • 8970 mg/kg; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation
Methylcyclohexane (1% TO 5%)	108-87-2	Acute Toxicity: Ingestion/Oral-Rat LD50 • >3200 mg/kg; Inhalation-Rabbit LC50 • 15227 ppm 1 Hour(s); Behavioral:General anesthetic; Behavioral:Convulsions or effect on seizure threshold; Gastrointestinal:Changes in structure or function of salivary glands; Irritation: Eye-Rabbit • 100 µL 24 Hour(s) • Mild irritation; Skin-Rabbit • 500 µL 24 Hour(s) • Mild irritation; Multi-dose Toxicity: Inhalation-Rat TCLo • 11 g/m ³ 6 Hour(s) 5 Day(s)-Intermittent; Behavioral:General anesthetic
Benzene (0% TO 4.9%)	71-43-2	Acute Toxicity: Ingestion/Oral-Rat LD50 • 930 mg/kg; Behavioral:Tremor; Behavioral:Convulsions or effect on seizure threshold; Inhalation-Rat LC50 • 10000 ppm 7 Hour(s); Inhalation-Human TCLo • 100 ppm; Behavioral:Somnolence (general depressed activity); Gastrointestinal:Nausea or vomiting; Skin and Appendages:After systemic exposure:Dermatitis, other; Inhalation-Human TCLo • 50 mg/m ³ 2 Hour(s); Behavioral:Changes in psychophysiological tests; Behavioral:Muscle weakness; Inhalation-Rat TCLo • 1 ppm 6 Hour(s); Kidney, Ureter, and Bladder:Other changes in urine composition; Skin-Rabbit LD50 • >9400 µL/kg; Irritation: Eye-Rabbit • 2 mg 24 Hour(s) • Severe irritation; Skin-Rabbit • 20 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TDLo • 100 ppm 6 Hour(s) 10 Day(s)-Intermittent; Blood:Changes in bone marrow not included above; Blood:Changes in platelet count; Mutagen: Dominant lethal test • Ingestion/Oral-Mouse • 1 mg/kg; Cytogenetic analysis • Inhalation-Human • 0.1 ppm; Cytogenetic analysis • Inhalation-Human • 125 ppm 1 Year(s); Sister chromatid exchange • Inhalation-Mouse • 10 ppm 6 Hour(s); Micronucleus test • Inhalation-Rat • 1 ppm 6 Hour(s); Reproductive: Inhalation-Mouse TCLo • 5 ppm (6-15D preg); Reproductive Effects:Effects on Embryo or Fetus:Cytological changes; Reproductive Effects:Specific Developmental Abnormalities:Blood and lymphatic system; Inhalation-Mouse TCLo • 20 ppm 6 Hour(s)(6-15D preg); Reproductive Effects:Specific Developmental Abnormalities:Blood and lymphatic system; Inhalation-Rat TCLo • 670 mg/m ³ 24 Hour(s)(15D pre/1-22D preg); Reproductive Effects:Effects on Fertility:Female fertility index; Parenteral-Mouse TDLo • 4

		g/kg (12D preg); Reproductive Effects:Effects on Newborn:Weaning or lactation index; Tumorigen / Carcinogen: Inhalation-Human • 10 mg/m³ 11 Year(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Blood:Leukemia
1-Methylethylbenzene (0.5% TO 4%)	98-82-8	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1400 mg/kg; Gastrointestinal:Gastritis; Inhalation-Rat LC50 • 39000 mg/m³ 4 Hour(s); Inhalation-Human TClO • 200 ppm; Behavioral:Somnolence (general depressed activity); Behavioral:Antipsychotic; Behavioral:Irritability; Inhalation-Mouse TClO • 5150 mg/m³ 2 Hour(s); Behavioral:General anesthetic; Inhalation-Rat TClO • 300 ppm 30 Minute(s); Lungs, Thorax, or Respiration:Respiratory depression; Skin-Rabbit LD50 • 12300 µL/kg; Irritation: Eye-Rabbit • 500 mg 24 Hour(s) • Mild irritation; Skin-Rabbit • 100 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TClO • 2000 mg/m³ 14 Week(s)-Continuous; Behavioral:Somnolence (general depressed activity); Inhalation-Rat TClO • 1200 ppm 6 Hour(s) 13 Week(s)-Intermittent; Sense Organs and Special Senses:Eye:Other; Behavioral:Changes in motor activity (specific assay); Blood: Pigmented or nucleated red blood cells; Mutagen: Mutation in microorganisms • Unreported Route-Salmonella typhimurium • 100 µg/plate 3 Hour(s)-S9)
Ethylbenzene (0.2% TO 4%)	100-41-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3500 mg/kg; Inhalation-Guinea Pig LClO • 2500 ppm 8 Hour(s); Behavioral:Coma; Inhalation-Human TClO • 21700 mg/m³; Behavioral:Antipsychotic; Inhalation-Mouse TClO • 600 ppm 6 Minute(s); Lungs, Thorax, or Respiration:Respiratory depression; Skin-Rabbit LD50 • 17800 µL/kg; Irritation: Eye-Rabbit • 500 mg • Severe irritation; Skin-Rabbit • 15 mg 24 Hour(s)-Open • Mild irritation; Multi-dose Toxicity: Inhalation-Rat TClO • 550 ppm 8 Hour(s) 5 Day(s)-Intermittent; Sense Organs and Special Senses:Ear:Change in acuity; Sense Organs and Special Senses:Ear:Changes in cochlear structure or function; Inhalation-Rat TDLo • 200 ppm 13 Week(s)-Intermittent; Sense Organs and Special Senses:Ear:Changes in cochlear structure or function; Mutagen: Specific locus test • Intraperitoneal-Mouse • 754 µmol/L; Micronucleus test • Unreported Route-Hamster • Embryo (Somatic cell) • 25 mg/L; Sister chromatid exchange • Unreported Route-Human • Lymphocyte (Somatic cell) • 10 mmol/L; Mutation in Mammalian Somatic Cells • Unreported Route-Mouse • Lymphocyte (Somatic cell) • 80 mg/L; Reproductive: Inhalation-Rabbit TClO • 1 g/m³ 24 Hour(s)(7-20D preg); Reproductive Effects:Effects on Fertility:Abortion; Inhalation-Rat TClO • 1000 ppm (6-20D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Inhalation-Rat TClO • 96 ppm 7 Hour(s)(1-19D preg); Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Inhalation-Rat TClO • 600 mg/m³ 24 Hour(s)(7-15D preg); Reproductive Effects:Effects on Fertility:Post-implantation mortality; Reproductive Effects:Effects on Embryo or Fetus:Fetal death; Reproductive Effects:Specific Developmental Abnormalities:Musculoskeletal system; Tumorigen / Carcinogen: Inhalation-Rat TClO • 750 ppm 6 Hour(s) 2 Year(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Kidney, Ureter, and Bladder:Tumors; Inhalation-Rat TClO • 23400 mg/kg 104 Week(s)-Intermittent; Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Kidney, Ureter, and Bladder:Kidney tumors; Reproductive Effects:Tumorigenic Effects:Testicular tumors
1-Hexene (1% TO 3%)	592-41-6	Acute Toxicity: Inhalation-Rat LC50 • 32000 ppm 4 Hour(s); Behavioral:General anesthetic; Behavioral:Somnolence (general depressed activity); Lungs, Thorax, or Respiration:Other changes; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 43 g/kg 43 Day(s)-Intermittent; Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis)
Methylcyclopentane (1% TO 3%)	96-37-7	Acute Toxicity: Inhalation-Mouse LClO • 95000 mg/m³; Behavioral:General anesthetic; Behavioral:Tetany
Cyclohexane (0% TO 3%)	110-82-7	Acute Toxicity: Ingestion/Oral-Rabbit LD50 • 5.5 mg/kg; Irritation: Skin-Rabbit • 1548 mg 2 Day(s)-Intermittent; Multi-dose Toxicity: Inhalation-Mouse TClO • 2000 ppm 13 Week(s)-Intermittent; Behavioral:Somnolence (general depressed activity)
Cyclopentane (1% TO 2%)	287-92-3	Acute Toxicity: Eye-Rabbit TDLo • 100 pph; Sense Organs and Special Senses:Eye:Conjunctive irritation; Ingestion/Oral-Rat LD50 • 11400 mg/kg; Behavioral:Somnolence (general depressed activity); Behavioral:Convulsions or effect on seizure threshold; Inhalation-Rat LC50 • 106000 mg/m³; Behavioral:Somnolence (general depressed activity); Behavioral:Convulsions or effect on seizure threshold; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 34200 mg/kg 30 Day(s)-Intermittent; Kidney, Ureter, and Bladder:Renal function tests depressed; Blood:Changes in other cell count (unspecified)
		Acute Toxicity: Ingestion/Oral-Rat LD50 • 490 mg/kg; Ingestion/Oral-Mouse TDLo • 158 mg/kg; Brain and Coverings:Other degenerative changes; Liver:Other changes; Biochemical:Metabolism (intermediary):Lipids, including transport; Inhalation-Human TClO • 250 mg/m³; Sense Organs and Special Senses:Eye:Lacrimation; Behavioral:Headache; Skin-Rabbit LD50 • >20 g/kg; Unreported-Guinea Pig LD50 •

Naphthalene (0.1% TO 2%)	91-20-3	<p>1200 mg/kg; Behavioral:Somnolence (general depressed activity); Irritation: Skin-Rabbit • 0.05 mL 24 Hour(s) • Severe irritation; Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 500 mg/kg 10 Day(s)-Intermittent; Behavioral:Sleep; Lungs, Thorax, or Respiration:Dyspnea; Ingestion/Oral-Rat TDLo • 4500 mg/kg 10 Day(s)-Intermittent; Brain and Coverings:Other degenerative changes; Mutagen: Specific locus test • Inhalation-Rat • 30 ppm 13 Week(s)-Intermittent; Cytogenetic analysis • Unreported Route-Hamster • Ovary (Somatic cell) • 30 mg/L; Reproductive: Ingestion/Oral-Mouse TDLo • 2400 mg/kg (7-14D preg); Reproductive Effects:Effects on Newborn:Live birth index; Reproductive Effects:Effects on Newborn:Viability index (e.g., # alive at day 4 per # born alive); Ingestion/Oral-Rat TDLo • 4500 mg/kg (6-15D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Specific Developmental Abnormalities:Other developmental abnormalities; Tumorigen / Carcinogen: Inhalation-Mouse TCLo • 30 ppm 6 Hour(s) 2 Year(s)-Intermittent; Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Inhalation-Rat TCLo • 1575 mg/kg 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors; Inhalation-Rat TCLo • 60 ppm 6 Hour(s) 105 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Sense Organs and Special Senses:Olfaction:Tumors</p>
Benzene, propyl- (0.5% TO 1.5%)	103-65-1	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 6040 mg/kg; Behavioral:Somnolence (general depressed activity); Inhalation-Rat LC50 • 65000 ppm 2 Hour(s); Multi-dose Toxicity: Ingestion/Oral-Rat TDLo • 10.18 g/kg 2 Week(s)-Intermittent; Sense Organs and Special Senses:Ear:Changes in cochlear structure or function</p>
Indene (0.5% TO 1.5%)	95-13-6	<p>Acute Toxicity: Inhalation-Rat LC50 • 14000 mg/m³ 4 Hour(s)</p>
Ethenylbenzene (0% TO 1%)	100-42-5	<p>Acute Toxicity: Ingestion/Oral-Rat LD50 • 2650 mg/kg; Behavioral:Somnolence (general depressed activity); Liver:Other changes; Inhalation-Rat LC50 • 11800 mg/m³ 4 Hour(s); Inhalation-Human TCLo • 376 ppm 1 Hour(s); Peripheral Nerve and Sensation:Flaccid paralysis without anesthesia (usually neuromuscular blockage); Behavioral:Changes in motor activity (specific assay); Irritation: Eye-Rabbit • 100 mg • Severe irritation; Skin-Rabbit • 100 % • Moderate irritation; Multi-dose Toxicity: Inhalation-Mouse TCLo • 500 ppm 90 Day(s)-Intermittent; Lungs, Thorax, or Respiration:Structural or functional change in trachea or bronchi; Liver:Hepatitis (hepatocellular necrosis), zonal; Related to Chronic Data:Death in the Other Multiple Dose data type field; Inhalation-Mouse TCLo • 250 ppm 6 Hour(s) 14 Day(s)-Intermittent; Liver:Hepatitis (hepatocellular necrosis), zonal; Liver:Changes in liver weight; Related to Chronic Data:Death in the Other Multiple Dose data type field; Inhalation-Mouse TCLo • 500 ppm 6 Hour(s) 22 Day(s)-Intermittent; Liver:Hepatitis (hepatocellular necrosis), diffuse; Blood:Changes in serum composition (e.g., TP, bilirubin cholesterol); Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:Other transferases; Inhalation-Rat TCLo • 600 ppm 4 Week(s)-Intermittent; Sense Organs and Special Senses:Ear:Change in acuity; Sense Organs and Special Senses:Ear:Changes in cochlear structure or function; Mutagen: Sister chromatid exchange • Inhalation-Human • 1204 mg/m³ 5 Year(s)-Intermittent; Sister chromatid exchange • Inhalation-Mouse • 125 ppm 4 Day(s)-Intermittent; DNA adduct • Inhalation-Mouse • 1500 µg/L 21 Day (s)-Intermittent; Cytogenetic analysis • Inhalation-Rat • 300 ppm 8 Week(s)-Intermittent; Reproductive: Inhalation-Rat TCLo • 1500 µg/m³ 24 Hour(s)(1-22D preg); Reproductive Effects:Effects on Embryo or Fetus:Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects:Effects on Embryo or Fetus:Fetal death; Inhalation-Rat TCLo • 5 mg/m³ 24 Hour(s)(1-22D preg); Reproductive Effects:Effects on Newborn:Stillbirth; Reproductive Effects:Effects on Newborn:Weaning or lactation index; Tumorigen / Carcinogen: Inhalation-Mouse TCLo • 160 ppm 6 Hour(s) 98 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Inhalation-Mouse TCLo • 20 ppm 6 Hour(s) 98 Week(s)-Intermittent; Tumorigenic:Neoplastic by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Inhalation-Rat TCLo • 100 ppm 4 Hour(s) 5 Day(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Skin and Appendages:Other:Tumors; Blood:Leukemia</p>

GHS Properties	Classification
Acute toxicity	<p>EU/CLP • Acute Toxicity - Inhalation 4 - ATEmix (inhl) = 12948 ppmV(4H) OSHA HCS 2012 • Acute Toxicity - Inhalation 4 - ATEmix (inhl) = 12004 ppmV(4H); Acute Toxicity - Oral 4 - ATEmix (oral) = 1386 mg/kg</p>

Aspiration Hazard	EU/CLP • Aspiration 1 OSHA HCS 2012 • Aspiration 1
Carcinogenicity	EU/CLP • Carcinogenicity 1A OSHA HCS 2012 • Carcinogenicity 1A
Germ Cell Mutagenicity	EU/CLP • Germ Cell Mutagenicity 1B OSHA HCS 2012 • Germ Cell Mutagenicity 1B
Skin corrosion/Irritation	EU/CLP • Skin Irritation 2 OSHA HCS 2012 • Skin Irritation 2
Skin sensitization	EU/CLP • Skin Sensitizer 1 OSHA HCS 2012 • Skin Sensitizer 1
STOT-RE	EU/CLP • Specific Target Organ Toxicity Repeated Exposure 2 OSHA HCS 2012 • Specific Target Organ Toxicity Repeated Exposure 1; Specific Target Organ Toxicity Repeated Exposure 2
STOT-SE	EU/CLP • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects OSHA HCS 2012 • Specific Target Organ Toxicity Single Exposure 3: Narcotic Effects; Specific Target Organ Toxicity Single Exposure 3: Respiratory Tract Irritation
Toxicity for Reproduction	EU/CLP • Toxic to Reproduction 2 OSHA HCS 2012 • Toxic to Reproduction 1B
Respiratory sensitization	EU/CLP • Data lacking OSHA HCS 2012 • Data lacking
Serious eye damage/Irritation	EU/CLP • Data lacking OSHA HCS 2012 • Eye Irritation 2

Potential Health Effects

Inhalation

Acute (Immediate)

- Harmful if inhaled. May cause respiratory irritation. May affect the central nervous system. Symptoms may include dizziness, drowsiness, lethargy, coma and death.

Chronic (Delayed)

- Repeated or prolonged inhalation can degenerate the liver, kidney, and cause hypoplasia of bone marrow. Repeated or prolonged exposure to hexane and cyclohexane may affect the peripheral nervous system with symptoms ranging from parasthesia to paralysis in the case of extreme overexposure. Toluene may also cause sensitization to Epinephrine or other Adrenalin-like agents.

Skin

Acute (Immediate)

- Causes skin irritation. May cause skin sensitization. Symptoms include redness, and skin rash.

Chronic (Delayed)

- Petroleum products are skin defatting agents and can cause dermatitis on prolonged or repeated exposure. Repeated or prolonged exposure may cause damage to peripheral nervous system with symptoms ranging from tingling of the skin to paralysis.

Eye

Acute (Immediate)

- Causes serious eye irritation.

Chronic (Delayed)

- No data available.

Ingestion

Acute (Immediate)

- Harmful if swallowed. Material may be aspirated into lungs during ingestion and/or subsequent vomiting. Aspiration of this material will cause severe lung injury, chemical pneumonitis, pulmonary edema or death. May cause gastrointestinal disturbances including diarrhea, nausea, and vomiting.

Chronic (Delayed)

- No data available

Other

Chronic (Delayed)

- Humans who were occupationally exposed to concentrations of toluene as low as 100 ppm for long periods of time have experienced hearing deficits. Hearing loss, as

demonstrated using behavioral and electrophysiological testing, as well as by observation of structural damage to cochlear hair cells, occurred in experimental animals exposed to toluene. It also appears that toluene exposure and noise may interact to produce hearing deficits.

Mutagenic Effects

- Repeated and prolonged exposure may cause mutagenic effects.

Carcinogenic Effects

- Repeated and prolonged exposure may cause cancer.

Carcinogenic Effects				
	CAS	OSHA	IARC	NTP
Benzene	71-43-2	Specifically Regulated Carcinogen	Group 1-Carcinogenic	Known Human Carcinogen
Ethynylbenzene	100-42-5	Not Listed	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen
Naphthalene	91-20-3	Not Listed	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen
Ethylbenzene	100-41-4	Not Listed	Group 2B-Possible Carcinogen	Not Listed
1-Methylethylbenzene	98-82-8	Not Listed	Group 2B-Possible Carcinogen	Reasonably Anticipated to be Human Carcinogen

Reproductive Effects

- Repeated and prolonged exposure may affect the reproductive system.

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information**12.1 Toxicity**

Delek Gasolines, All Grades Unleaded					
Dosage	Species	Duration	Results	Exposure Conditions	Comments
375 mg/L	Fish: Mozambique Tilapia	96 Hour (s)	LC50	NDA	Heptane (142-82-5)
2.1-2.98 mg/L	Fish: Fathead minnow	96 Hour (s)	LC50	NDA	Hexane (110-54-3)
5.8 mg/L	Fish: Striped Bass	NDA	LC50	NDA	Methylcyclohexane (108-87-2)
2.7 mg/L	Fish: NDA	96 Hour (s)	LC50	NDA	1-Methylethylbenzene (98-82-8)
7.4 mg/L	Crustacea: Artemia sp.(Brine Shrimp)	48 Hour (s)	EC50	NDA	1-Methylethylbenzene (98-82-8)
2.6 mg/L	Aquatic Plant(s): Pseudokirchneriella subcapitata (Green Algae)	72 Hour (s)	EC50	NDA	1-Methylethylbenzene (98-82-8)
30 mg/L	Crustacea: Water flea	2 Day(s)	EC50	NDA	1-Hexene (592-41-6)
25 mg/L	Fish: Zebra Danio	4 Day(s)	LC50	NDA	1-Hexene (592-41-6)
34.7 mg/L	Fish: Bluegill	96 Hour (s)	LC50	NDA	Cyclohexane (110-82-7)
10 mg/L	Crustacea: Water flea	2 Day(s)	NOEC	NDA	Cyclopentane (287-92-3)
10 mg/L	Fish: Zebra Danio	4 Day(s)	NOEC	NDA	Cyclopentane (287-92-3)

0.213 mg/L	Fish: Melanotaeni a fluviatilis (Chrimson-Spotted Rainbowfish)	96 Hour (s)	LC50	NDA	Naphthalene (91-20-3)
136 mg/L	Crustacea: Daphnia magna (Water Flea)	48 Hour (s)	EC50	NDA	Naphthalene (91-20-3)
1 mg/L	Crustacea: Daphnia magna (Water Flea)	48 Hour (s)	NOEC	NDA	Naphthalene (91-20-3)
4.15 mg/L	Aquatic Plant(s): Scenedesmus subspicatus (Green Algae)	7 Day(s)	NOEC	NDA	Naphthalene (91-20-3)
1.8 mg/L	Aquatic Plant(s): Green Algae	3 Day(s)	EC50	NDA	Benzene, propyl- (103-65-1)
1.55 mg/L	Fish: Rainbow trout	4 Day(s)	LC50	NDA	Benzene, propyl- (103-65-1)

- Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

- Material Data Lacking.

12.3 Bioaccumulative potential

- Material Data Lacking.

12.4 Mobility in Soil

- Material Data Lacking.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

Ecological Fate

- Gasoline contains components that are potentially toxic to freshwater and saltwater ecosystems. It will normally float on water. The lighter components of gasoline will evaporate rapidly. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an anaerobic environment. This coating action can also be harmful or fatal to plankton, algae, aquatic life, and water birds.

Potential Environmental Effects

- This product, its storage tank bottoms and sludge, and any contaminated soil or water may be hazardous to human, animal, and aquatic life. Volatile components of this product may contribute to smog.

12.7 Other Information

- This material can be hazardous to human health or the environment. If spilled, this material will normally evaporate rapidly. Hydrocarbon components may contribute to atmospheric smog. The atmospheric half-life of the butane components under photochemical smog conditions are estimated to be between three and seven days. Isopentane, n-pentane, hexane isomers, n-heptane, heptane isomers and iso-octane have estimated half-lives of between two and five days in air when photochemical hydroxyl or nitrate radicals are present. Toluene has a half-life of from three hours to approximately one day. Cyclohexane has a half-life of from six hours to over four days when hydroxyl radicals are present.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

- This material, if discarded as produced, would be a RCRA "characteristic" hazardous waste due to the characteristic(s) of ignitability (D001) and benzene (D018). If the material is spilled to soil or water, characteristic testing of the contaminated materials is recommended. Further, this material, once it becomes a waste, is subject to the land disposal restrictions in 40 CFR 268.40 and may require treatment prior to disposal to meet specific standards. Consult state and local regulations to determine

whether they are more stringent than the federal requirements.

Packaging waste

- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Empty drums should be completely drained, properly bunged, and promptly shipped to the supplier or a drum reconditioner. All containers should be disposed of in an environmentally safe manner.

13.2 Other Information

- Maximize material recovery for reuse or recycling. If spilled material is introduced into a wastewater treatment system, chemical and biological oxygen demand (COD and BOD) will likely increase. This material is biodegradable if gradually exposed to microorganisms, preferably in an aerobic environment. In sewage-seeded wastewater, at or below concentrations of 0.2 vol.% of this material, there is little or no effect on bio-oxidation and/or digestion. However, at 1 vol.%, it doubles the required digestion period. Higher concentrations interfere with floc formation and sludge settling and also plug filters or exchange beds. Vapor emissions from a bio-oxidation process contaminated with this material can be a health hazard.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN1203	Gasoline	3	II	NDA
TDG	UN1203	GASOLINE	3	II	NDA
IMO/IMDG	UN1203	GASOLINE	3	II	NDA
IATA/ICAO	UN1203	Gasoline	3	II	NDA

14.6 Special precautions for user

- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications • Acute, Chronic, Fire

Inventory						
Component	CAS	Canada DSL	Canada NDSL	EU EINECS	EU ELNICS	TSCA
1-Hexene	592-41-6	Yes	No	Yes	No	Yes
1-Methylethylbenzene	98-82-8	Yes	No	Yes	No	Yes
2-Methylbutane (In Liquid form)	78-78-4	Yes	No	Yes	No	Yes
Benzene	71-43-2	Yes	No	Yes	No	Yes
Benzene, propyl-	103-65-1	Yes	No	Yes	No	Yes
Benzene, trimethyl-	25551-13-7	Yes	No	Yes	No	Yes
Butane	106-97-8	Yes	No	Yes	No	Yes
Cyclohexane	110-82-7	Yes	No	Yes	No	Yes
Cyclopentane	287-92-3	Yes	No	Yes	No	Yes

Ethenylbenzene	100-42-5	Yes	No	Yes	No	Yes
Ethyl toluene	25550-14-5	Yes	No	Yes	No	Yes
Ethylbenzene	100-41-4	Yes	No	Yes	No	Yes
Heptane	142-82-5	Yes	No	Yes	No	Yes
Hexane	110-54-3	Yes	No	Yes	No	Yes
Indene	95-13-6	Yes	No	Yes	No	Yes
Methylcyclohexane	108-87-2	Yes	No	Yes	No	Yes
Methylcyclopentane	96-37-7	Yes	No	Yes	No	Yes
Naphthalene	91-20-3	Yes	No	Yes	No	Yes
Nonane	111-84-2	Yes	No	Yes	No	Yes
Octane	111-65-9	Yes	No	Yes	No	Yes
Pentane	109-66-0	Yes	No	Yes	No	Yes
Toluene	108-88-3	Yes	No	Yes	No	Yes
Xylene	1330-20-7	Yes	No	Yes	No	Yes

Canada

Labor

Canada - WHMIS - Classifications of Substances

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	B2
• Indene	95-13-6	B3
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	B2
• Cyclopentane	287-92-3	B2
• Pentane	109-66-0	B2
• Octane	111-65-9	B2, D2B
• Nonane	111-84-2	B2, D2B
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	B4, D2A
• Benzene, trimethyl-	25551-13-7	B3
• 2-Methylbutane (In Liquid form)	78-78-4	B2
• 1-Methylethylbenzene	98-82-8	B2, D2A
• Cyclohexane	110-82-7	B2, D2B
• Ethylbenzene	100-41-4	B2, D2A, D2B
• Heptane	142-82-5	B2, D2B
• Ethenylbenzene	100-42-5	B2, D2A
• Toluene	108-88-3	B2, D2A, D2B
• Xylene	1330-20-7	B2, D2A, D2B
• Benzene	71-43-2	B2, D2A, D2B
• Butane	106-97-8	A, B1
• Hexane	110-54-3	B2, D2A, D2B

Canada - WHMIS - Ingredient Disclosure List

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	1 %
• Indene	95-13-6	1 %
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	1 %
• Pentane	109-66-0	1 %

• Octane	111-65-9	1 %
• Nonane	111-84-2	1 %
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	1 %
• Benzene, trimethyl-	25551-13-7	1 %
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	1 %
• Cyclohexane	110-82-7	1 %
• Ethylbenzene	100-41-4	0.1 %
• Heptane	142-82-5	1 %
• Ethenylbenzene	100-42-5	0.1 %
• Toluene	108-88-3	1 %
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	0.1 %
• Butane	106-97-8	1 %
• Hexane	110-54-3	1 %

Environment

Canada - CEPA - Priority Substances List

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Priority Substance List 1 (substance not considered toxic)
• Toluene	108-88-3	Priority Substance List 1 (substance not considered toxic)
• Xylene	1330-20-7	Priority Substance List 1 (substance not considered toxic)
• Benzene	71-43-2	Priority Substance List 1 (substance considered toxic)
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

Other Agency Information

Other

AIHA - Emergency Response Planning Guidelines - ERPG-1 Values

• Ethyl toluene	25550-14-5	Not Listed
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• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	50 ppm ERPG-1
• Toluene	108-88-3	50 ppm ERPG-1
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	50 ppm ERPG-1
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

United States

Labor

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed

• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	5 ppm STEL (See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	(listed under Ethyl benzene)
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	(isomers and mixtures)
• Benzene	71-43-2	(including Benzene from gasoline)
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - CAA (Clean Air Act) - Accidental Release Prevention - Flammable Substances

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed

• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	10000 lb threshold quantity
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	10000 lb threshold quantity
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	10000 lb threshold quantity
• Hexane	110-54-3	Not Listed

U.S. - CAA (Clean Air Act) - Accidental Release Prevention - Toxic Substances

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed

• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	100 lb final RQ; 45.4 kg final RQ
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	5000 lb final RQ; 2270 kg final RQ
• Cyclohexane	110-82-7	1000 lb final RQ; 454 kg final RQ
• Ethylbenzene	100-41-4	1000 lb final RQ; 454 kg final RQ
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	1000 lb final RQ; 454 kg final RQ
• Toluene	108-88-3	1000 lb final RQ; 454 kg final RQ
• Xylene	1330-20-7	100 lb final RQ; 45.4 kg final RQ
		10 lb final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule); 4,54 kg final RQ (received an adjusted RQ of 10 lbs based on potential carcinogenicity in an August 14, 1989 final rule)
• Benzene	71-43-2	
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	5000 lb final RQ; 2270 kg final RQ

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed

• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	0.1 % de minimis concentration
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	1.0 % de minimis concentration
• Cyclohexane	110-82-7	1.0 % de minimis concentration
• Ethylbenzene	100-41-4	0.1 % de minimis concentration
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	0.1 % de minimis concentration
• Toluene	108-88-3	1.0 % de minimis concentration
• Xylene	1330-20-7	1.0 % de minimis concentration
• Benzene	71-43-2	0.1 % de minimis concentration
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	1.0 % de minimis concentration

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed

• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Toxic Characteristic

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	0.5 mg/L regulatory level
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - F Series Wastes - Wastes from Nonspecific Sources

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - K Series Wastes - Wastes from Specified Sources

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

United States - California**Environment****U.S. - California - Proposition 65 - Carcinogens List**

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	carcinogen, initial date 4/19/02
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	carcinogen, initial date 4/6/10
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	carcinogen, initial date 6/11/04
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	carcinogen, initial date 2/27/87
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	developmental toxicity, initial date 1/1/91
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	developmental toxicity, initial date 12/26/97
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	7000 µg/day MADL (level represents absorbed dose)
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	24 µg/day MADL (oral); 49 µg/day MADL (inhalation)
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	5.8 µg/day NSRL
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	54 µg/day NSRL (inhalation); 41 µg/day NSRL (oral)
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	6.4 µg/day NSRL (oral); 13 µg/day NSRL (inhalation)
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

• Ethyl toluene	25550-14-5	Not Listed
• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	female reproductive toxicity, initial date 8/7/09
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	Not Listed
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

• Ethyl toluene	25550-14-5	Not Listed
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• Methylcyclohexane	108-87-2	Not Listed
• Indene	95-13-6	Not Listed
• Methylcyclopentane	96-37-7	Not Listed
• Benzene, propyl-	103-65-1	Not Listed
• Cyclopentane	287-92-3	Not Listed
• Pentane	109-66-0	Not Listed
• Octane	111-65-9	Not Listed
• Nonane	111-84-2	Not Listed
• 1-Hexene	592-41-6	Not Listed
• Naphthalene	91-20-3	Not Listed
• Benzene, trimethyl-	25551-13-7	Not Listed
• 2-Methylbutane (In Liquid form)	78-78-4	Not Listed
• 1-Methylethylbenzene	98-82-8	Not Listed
• Cyclohexane	110-82-7	Not Listed
• Ethylbenzene	100-41-4	Not Listed
• Heptane	142-82-5	Not Listed
• Ethenylbenzene	100-42-5	Not Listed
• Toluene	108-88-3	Not Listed
• Xylene	1330-20-7	Not Listed
• Benzene	71-43-2	male reproductive toxicity, initial date 12/26/97
• Butane	106-97-8	Not Listed
• Hexane	110-54-3	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- **WARNING:** This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H220 - Extremely flammable gas
- H224 - Extremely flammable liquid and vapour
- H226 - Flammable liquid and vapour
- H280 - Contains gas under pressure; may explode if heated
- H302 - Harmful if swallowed
- H312 - Harmful in contact with skin
- H319 - Causes serious eye irritation
- H335 - May cause respiratory irritation
- H351 - Suspected of causing cancer.
- H411 - Toxic to aquatic life with long lasting effects
- H412 - Harmful to aquatic life with long lasting effects
- R10 - Flammable.
- R12 - Extremely flammable.
- R20 - Harmful by inhalation.
- R20/21 - Harmful by inhalation and in contact with skin.
- R22 - Harmful if swallowed.
- R36/38 - Irritating to eyes and skin.
- R37 - Irritating to respiratory system.
- R40 - Limited evidence of a carcinogenic effect.
- R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R48/23/24/25 - Toxic: danger of serious damage to health by prolonged exposure

through inhalation, in contact with skin and if swallowed.
R51 - Toxic to aquatic organisms.
R53 - May cause long-term adverse effects in the aquatic environment.

Last Revision Date

- 26/June/2015

Preparation Date

- 09/February/2011

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Key to abbreviations

NDA = No Data Available
