

**UTG 96 (unleaded test gasoline)**

Version 5.2

Revision Date 2026-08-19

SECTION 1: Identification of the substance/mixture and of the company/undertaking**Product information**

Product Name : UTG 96 (unleaded test gasoline)
Material : 1021671, 1032452, 1021667, 1021669, 1021670, 1021668
Use : Reference Fuel
Uses advised against : This material should not be used for purposes other than the identified uses in section 1 without expert advice.

Company : Chevron Phillips Chemical Company LP
9500 Lakeside Blvd.
The Woodlands, TX 77381

Emergency telephone:**Health:**

866.442.9628 (North America)

1.832.813.4984 (International)

Transport:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)

Asia: CHEMWATCH (+612 9186 1132) China: 0532 8388 9090

Mexico CHEMTREC 01-800-681-9531 (24 hours)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Argentina: +(54)-1159839431

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Austria: VIZ +43 1 406 43 43 (24 hours/day, 7 days/week)

Belgium: 070 245 245 (24 hours/day, 7 days/week)

Bulgaria: +359 2 9154 233

Croatia: +3851 2348 342 (24 hours/day, 7 days/week)

Cyprus: 1401

Czech Republic: Toxicological Information Center +420 224 919 293, +420 224 915 402

Denmark: Danish Poison Center (Giftlinjen): +45 8212 1212

Estonia: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Finland: 0800 147 111 09 471 977 (24 hours/day)

France: ORFILA number (INRS): + 33 (0) 1 45 42 59 59 (24 hours/day, 7 days/week)

Germany: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Greece: (0030) 2107793777 (24 hours/day, 7 days/week)

Hungary: +36-80-201-199 (24 hours/day, 7 days/week)

Iceland: 543 2222 (24 hours/day, 7 days/week)

Ireland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Italy: POISON CENTER MILAN – Azienda Ospedaliera Niguarda Ca` Grande Tel. +39 02 66101029; POISON CENTER ROME – Policlinico “Agostino Gemelli”, Servizio di tossicologia clinica Tel. +39 06 3054343; POISON CENTER ROME – Ospedale Pediatrico Bambino Gesù Tel. +39 06 68593726; POISON CENTER ROME – Policlinico “Umberto I” Tel. +39 06 4997 8000; POISON CENTER FOGGIA – Azienda Ospedaliera Universitaria Riuniti Tel. +39 0881 732326; POISON CENTER NAPLES – Azienda Ospedaliera “Antonio Cardarelli” Tel. +39 081 7472870; POISON CENTER FLORENCE – Azienda Ospedaliera universitaria Careggi Tel. +39 055 7947819; POISON CENTER PAVIA – IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 24444; POISON CENTER BERGAMO – Azienda Ospedaliera “Papa Giovanni XXIII” Tel. 800 883 300; POISON CENTER VERONA – Azienda Ospedaliera Universitaria integrata Tel. 800 011 858;

Latvia: State Fire and Rescue Service, phone number: 112; Toxicology and Sepsis Clinic Poisoning and Drug Information Center, Hipokrāta 2, Riga, Latvia, LV-1038, phone number +371 67042473. (24 hours.)

Liechtenstein: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Lithuania: +370 (85) 2362052

Luxembourg: (+352) 8002 5500 (24 hours/day, 7 days/week)

Malta: +356 2395 2000

The Netherlands: NVIC: +31 (0)88 755 8000

Norway: 22 59 13 00 (24 hours/day, 7 days/week)

Poland: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Portugal: CIAV phone number: +351 800 250 250

Romania: +40213183606

Slovakia: +421 2 5477 4166

Slovenia: Phone number: 112

Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week)

Sweden: 112 – ask for Poisons Information

Organization that prepared the SDS : Product Safety and Toxicology Group

E-mail address : SDS@CPChem.com

Website : www.CPChem.com

SECTION 2: Hazards identification**Classification of the substance or mixture**

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Classification

: Flammable liquids, Category 1
 Skin irritation, Category 2
 Germ cell mutagenicity, Category 1B
 Carcinogenicity, Category 1A
 Reproductive toxicity, Category 2
 Specific target organ toxicity - single exposure, Category 3, Central nervous system
 Specific target organ toxicity - repeated exposure, Category 2, Inhalation, Auditory organs, color vision
 Aspiration hazard, Category 1

Labeling

Symbol(s)

:



UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Signal Word : Danger

Hazard Statements : H224: Extremely flammable liquid and vapor.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H336: May cause drowsiness or dizziness.
 H340: May cause genetic defects.
 H350: May cause cancer.
 H361: Suspected of damaging fertility or the unborn child.
 H373: May cause damage to organs (Auditory organs, color vision) through prolonged or repeated exposure if inhaled.

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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P233 Keep container tightly closed.
 P240 Ground and bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use non-sparking tools.
 P243 Take action to prevent static discharges.
 P260 Do not breathe mist or vapors.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
Response:
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
 P308 + P313 IF exposed or concerned: Get medical advice/ attention.
 P331 Do NOT induce vomiting.
 P332 + P313 If skin irritation occurs: Get medical advice/ attention.
 P362 + P364 Take off contaminated clothing and wash it before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
 P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
 P403 + P235 Store in a well-ventilated place. Keep cool.
 P405 Store locked up.
Disposal:
 P501 Dispose of contents/ container to an approved waste disposal plant.

Carcinogenicity:

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

IARC

Group 1: Carcinogenic to humans

Benzene 71-43-2

Group 2B: Possibly carcinogenic to humans

Naphtha, Petroleum, Heavy 64741-54-4

Catalytic Cracked

Naphtha (petroleum), light 64741-63-5

catalytic reformed

Hydrocarbons, C3-11, 68476-46-0

catalytic cracker distillates

Naphtha (petroleum), light 64741-66-8

alkylate

Ethylbenzene 100-41-4

Naphthalene 91-20-3

Isoprene 78-79-5

NTP

Known to be human carcinogen

Benzene 71-43-2

Reasonably anticipated to be a human carcinogen

Naphthalene 91-20-3

Isoprene 78-79-5

SECTION 3: Composition/information on ingredients

Synonyms : Unleaded Test Gasoline-96 RON

Molecular formula : Mixture

Component	CAS-No.	Weight %
Naphtha, Petroleum, Heavy Catalytic Cracked	64741-54-4	0 - 100
Naphtha (petroleum), light catalytic reformed	64741-63-5	0 - 100
Hydrocarbons, C3-11, catalytic cracker distillates	68476-46-0	0 - 100
Naphtha (petroleum), light alkylate	64741-66-8	0 - 60
Toluene	108-88-3	0 - 60
Isopentane	78-78-4	0 - 40
3,3-Dimethylpentane	562-49-2	0 - 60
2,2,4-Trimethylpentane (Isooctane)	540-84-1	0 - 30
Xylenes	1330-20-7	0 - 25
C9-C11 Isoalkanes	68551-16-6	0 - 20
Isoalkanes C7-8	70024-92-9	0 - 20
Heptane, branched, cyclic and linear	426260-76-6	0 - 20
Cyclopentane	287-92-3	0 - 20
n-Heptane	142-82-5	0 - 20
n-Butane	106-97-8	0 - 20
n-hexane	110-54-3	0 - 20
1-Hexene	592-41-6	0 - 10
Ethylbenzene	100-41-4	0 - 10
1,2,4-Trimethylbenzene	95-63-6	0 - 10
2,2-Dimethylbutane	75-83-2	0 - 10
2-Methylpentane	107-83-5	0 - 10
Naphthalene	91-20-3	0 - 10
Benzene	71-43-2	0 - 5
3-Methylpentane	96-14-0	0 - 5
2-Methylhexane	591-76-4	0 - 5

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Methylcyclopentane	96-37-7	0 - 5
3-Methylhexane	589-34-4	0 - 5
2-methyl-2-butene	513-35-9	0 - 5
Cyclohexane	110-82-7	0 - 5
2,3-Dimethylbutane	79-29-8	0 - 5
2,3-Dimethylpentane	565-59-3	0 - 5
2,4-Dimethylpentane	108-08-7	0 - 5
n-Pentane	109-66-0	0 - 5
Methylcyclohexane	108-87-2	0 - 5
2,3,4-Trimethylpentane	565-75-3	0 - 5
Hydrogen Sulfide	7783-06-4	0 - 1
Isoprene	78-79-5	0 - 1

SECTION 4: First aid measures

- General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.
- If inhaled : Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- If swallowed : Keep respiratory tract clear. Do NOT induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

Notes to physician

- Risks : May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure if inhaled. May be fatal if swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure if inhaled.
- Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

- Flash point : -37°C (-35°F)
Method: PMCC
- Suitable extinguishing : Alcohol-resistant foam. Carbon dioxide (CO2). Dry chemical.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

media

Unsuitable extinguishing media : High volume water jet.

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.

Fire and explosion protection : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Hazardous decomposition products : Carbon oxides.

SECTION 6: Accidental release measures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7: Handling and storage**Handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Storage

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Uses advised against : This material should not be used for purposes other than the identified uses in section 1 without expert advice.

Use : Reference Fuel

SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****Chevron Phillips Chemical Company LP**

Components	Basis	Value	Control parameters	Note
C9-C11 Isoalkanes	Manufacturer	TWA	1,200 mg/m3	RCP,
Isoalkanes C7-8	Manufacturer	TWA	300 ppm,	

RCP Reciprocal Calculation Procedure

US

Components	Basis	Value	Control parameters	Note
Naphtha, Petroleum, Heavy Catalytic Cracked	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
Naphtha (petroleum), light catalytic reformed	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
Hydrocarbons, C3-11, catalytic cracker distillates	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
Naphtha (petroleum), light alkylate	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
	OSHA Z-1	TWA	5 mg/m3	Mist
	OSHA Z-1-A	TWA	5 mg/m3	Mist
	NIOSH REL	TWA	5 mg/m3	Mist
	NIOSH REL	ST	10 mg/m3	Mist
	CAL PEL	PEL	5 mg/m3	particulate
Toluene	ACGIH	TWA	20 ppm,	OTO, A4,
	OSHA Z-2	TWA	200 ppm,	
	OSHA Z-2	CEIL	300 ppm,	
	OSHA Z-2	Peak	500 ppm,	
	OSHA Z-1-A	TWA	100 ppm, 375 mg/m3	
	OSHA Z-1-A	STEL	150 ppm, 560 mg/m3	
Isopentane	ACGIH	TWA	1,000 ppm,	
3,3-Dimethylpentane	ACGIH	TWA	400 ppm,	
	ACGIH	STEL	500 ppm,	
2,2,4-Trimethylpentane (Isooctane)	ACGIH	TWA	300 ppm,	
Xylenes	OSHA Z-1	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	STEL	150 ppm, 655 mg/m3	
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	ACGIH	TWA	20 ppm,	OTO, A4,
	ACGIH	STEL	150 ppm,	A4,
Heptane, branched, cyclic and linear	ACGIH	TWA	400 ppm,	
	ACGIH	STEL	500 ppm,	
Cyclopentane	ACGIH	TWA	1,000 ppm,	
	OSHA Z-1-A	TWA	600 ppm, 1,720 mg/m3	
n-Heptane	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	OSHA Z-1-A	STEL	500 ppm, 2,000 mg/m3	
	ACGIH	TWA	200 ppm,	OTO,
	ACGIH	STEL	400 ppm,	OTO,
n-Butane	OSHA Z-1-A	TWA	800 ppm, 1,900 mg/m3	
	ACGIH	STEL	1,000 ppm,	
n-hexane	ACGIH	TWA	50 ppm,	Skin,
	OSHA Z-1	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	TWA	50 ppm, 180 mg/m3	
1-Hexene	ACGIH	TWA	50 ppm,	
1,2,4-Trimethylbenzene	ACGIH	TWA	25 ppm,	
	OSHA Z-1-A	TWA	25 ppm, 125 mg/m3	
	ACGIH	TWA	10 ppm,	A4,
Ethylbenzene	OSHA Z-1	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	STEL	125 ppm, 545 mg/m3	
	ACGIH	TWA	20 ppm,	OTO, A3,
2,2-Dimethylbutane	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
	ACGIH	TWA	200 ppm,	A3,
2-Methylpentane	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
	ACGIH	TWA	200 ppm,	A3,
Naphthalene	ACGIH	TWA	10 ppm,	A3, Skin,
	ACGIH	STEL	15 ppm,	hematologic eff, URT irr, eye irr, eye dam, (), A4, Skin,
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	
Benzene	ACGIH	TWA	0.02 ppm,	A1, Skin,
	OSHA Z-1-A	TWA	1 ppm,	
	OSHA Z-1-A	CEIL	5 ppm,	
	OSHA Z-2	Peak	50 ppm,	
	OSHA 29 CFR 1910.1028(c)	TWA	1 ppm,	
	OSHA 29 CFR 1910.1028(c)	STEL	5 ppm,	
	OSHA CARC	PEL	1 ppm,	
	OSHA CARC	STEL	5 ppm,	
3-Methylpentane	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
	ACGIH	TWA	200 ppm,	A3,
2-Methylhexane	ACGIH	TWA	400 ppm,	
	ACGIH	STEL	500 ppm,	
Methylcyclopentane	ACGIH	TWA	500 ppm,	CNS impair, URT irr, eye irr,
	ACGIH	STEL	1,000 ppm,	CNS impair, URT irr, eye irr,
	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
3-Methylhexane	ACGIH	TWA	400 ppm,	
	ACGIH	STEL	500 ppm,	
2-methyl-2-butene	ACGIH	TWA	10 ppm,	
Cyclohexane	ACGIH	TWA	100 ppm,	
	OSHA Z-1	TWA	300 ppm, 1,050 mg/m3	
	OSHA Z-1-A	TWA	300 ppm, 1,050 mg/m3	
2,3-Dimethylbutane	OSHA Z-1-A	TWA	500 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	1,000 ppm, 3,600 mg/m3	
	ACGIH	TWA	200 ppm,	A3,
2,3-Dimethylpentane	ACGIH	TWA	200 ppm,	OTO,
	ACGIH	STEL	400 ppm,	OTO,
2,4-Dimethylpentane	ACGIH	TWA	200 ppm,	OTO,
	ACGIH	STEL	400 ppm,	OTO,
n-Pentane	OSHA Z-1	TWA	1,000 ppm, 2,950 mg/m3	
	OSHA Z-1-A	TWA	600 ppm, 1,800 mg/m3	
	OSHA Z-1-A	STEL	750 ppm, 2,250 mg/m3	
	ACGIH	TWA	1,000 ppm,	
Methylcyclohexane	ACGIH	TWA	100 ppm,	
	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	
	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
2,3,4-Trimethylpentane	ACGIH	TWA	300 ppm,	
Hydrogen Sulfide	ACGIH	TWA	1 ppm,	
	ACGIH	STEL	5 ppm,	
	OSHA Z-2	CEIL	20 ppm,	
	OSHA Z-2	Peak	50 ppm,	
	OSHA Z-1-A	TWA	10 ppm, 14 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 21 mg/m3	

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Isoprene	US WEEL	TWA	2 ppm,	
() Adopted values or notations enclosed are those for which changes are proposed in the NIC A1 Confirmed human carcinogen A3 Confirmed animal carcinogen with unknown relevance to humans A4 Not classifiable as a human carcinogen CNS impair Central Nervous System impairment eye dam Eye damage eye irr Eye irritation hematologic eff Hematologic effects OTO Ototoxicant Skin Danger of cutaneous absorption URT irr Upper Respiratory Tract irritation				

Immediately Dangerous to Life or Health Concentrations (IDLH)

Substance name	CAS-No.	Control parameters	Update
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01
Naphtha (petroleum), light alkylate	64741-66-8	Immediately Dangerous to Life or Health Concentration Value 2500 mg/m ³	2020-07-01
n-Heptane	142-82-5	Immediately Dangerous to Life or Health Concentration Value 750 parts per million	1995-03-01
Xylenes	1330-20-7	Immediately Dangerous to Life or Health Concentration Value 900 parts per million	2017-09-01
n-Butane	106-97-8	Immediately Dangerous to Life or Health Concentration Value 1600 parts per million	2017-02-03
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 parts per million	1995-03-01
Benzene	71-43-2	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01
n-hexane	110-54-3	Immediately Dangerous to Life or Health Concentration Value 1100 parts per million	1995-03-01
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 parts per million	1995-03-01
n-Pentane	109-66-0	Immediately Dangerous to Life or Health Concentration Value 1500 parts per million	1995-03-01
n-Octane	111-65-9	Immediately Dangerous to Life or Health Concentration Value 1000 parts per million	1995-03-01
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01
Naphtha (petroleum), light alkylate	64741-66-8	Immediately Dangerous to Life or Health Concentration Value 2500 mg/m ³	2020-07-01
n-Heptane	142-82-5	Immediately Dangerous to Life or Health Concentration Value 750 parts per million	1995-03-01
Xylenes	1330-20-7	Immediately Dangerous to Life or Health Concentration Value 900 parts per million	2017-09-01
n-Butane	106-97-8	Immediately Dangerous to Life or Health Concentration Value 1600 parts per million	2017-02-03
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 parts per million	1995-03-01
Benzene	71-43-2	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

n-hexane	110-54-3	Immediately Dangerous to Life or Health Concentration Value 1100 parts per million	1995-03-01
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 parts per million	1995-03-01
n-Pentane	109-66-0	Immediately Dangerous to Life or Health Concentration Value 1500 parts per million	1995-03-01
n-Octane	111-65-9	Immediately Dangerous to Life or Health Concentration Value 1000 parts per million	1995-03-01
Methylcyclohexane	108-87-2	Immediately Dangerous to Life or Health Concentration Value 1200 parts per million	1995-03-01
Cyclohexane	110-82-7	Immediately Dangerous to Life or Health Concentration Value 1300 parts per million	1995-03-01
Propane	74-98-6	Immediately Dangerous to Life or Health Concentration Value 2100 parts per million	1995-03-01
Naphtha (petroleum), light alkylate	64741-66-8	Immediately Dangerous to Life or Health Concentration Value 2500 mg/m ³	2020-07-01
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01
Xylenes	1330-20-7	Immediately Dangerous to Life or Health Concentration Value 900 parts per million	2017-09-01
n-Heptane	142-82-5	Immediately Dangerous to Life or Health Concentration Value 750 parts per million	1995-03-01
n-Butane	106-97-8	Immediately Dangerous to Life or Health Concentration Value 1600 parts per million	2017-02-03
n-hexane	110-54-3	Immediately Dangerous to Life or Health Concentration Value 1100 parts per million	1995-03-01
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 parts per million	1995-03-01
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 parts per million	1995-03-01
Benzene	71-43-2	Immediately Dangerous to Life or Health Concentration Value 500 parts per million	1995-03-01
Cyclohexane	110-82-7	Immediately Dangerous to Life or Health Concentration Value 1300 parts per million	1995-03-01
n-Pentane	109-66-0	Immediately Dangerous to Life or Health Concentration Value 1500 parts per million	1995-03-01
Methylcyclohexane	108-87-2	Immediately Dangerous to Life or Health Concentration Value 1200 parts per million	1995-03-01
Hydrogen Sulfide	7783-06-4	Immediately Dangerous to Life or Health Concentration Value 100 parts per million	1995-03-01

Biological exposure indices**US**

Substance name	CAS-No.	Control parameters	Sampling time	Update
Toluene	108-88-3	Toluene: 0.02 mg/l (In blood)	Prior to last shift of workweek	2010-03-01
		Toluene: 0.03 mg/l (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

		o-Cresol: 0.3 mg/g creatinine Background (Urine) With hydrolyses ()	End of shift (As soon as possible after exposure ceases)	2010-03-01
Xylenes	1330-20-7	Methylhippuric acids: 0.3 g/g creatinine 2024 Adoption (Urine) Commercial or technical grade xylenes consist of mixtures of isomers and significant amounts of ethyl benzene as indicated under 'Properties.' Because ethyl benzene is known to reduce the metabolism of xylenes to methylhippuric acids, the BEI applies to technical or commercial grades of xylenes only. () The determinants refer to the total of all isomers of methylhippuric acids. () Adopted values or notations enclosed are those for which changes are proposed in the NIC ()	End of shift (As soon as possible after exposure ceases)	2024-01-01
n-hexane	110-54-3	2,5-Hexanedione: 0.5 mg/l Without hydrolysis (Urine)	End of shift	2020-02-01
Ethylbenzene	100-41-4	Sum of mandelic acid and phenyl glyoxylic acid: 150 mg/g creatinine 2024 Adoption (Urine) Nonspecific ()	End of shift (As soon as possible after exposure ceases)	2024-01-01
Benzene	71-43-2	S-Phenylmercapturic acid: 25 µg/g creatinine Background (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
		t,t-Muconic acid: 500 µg/g creatinine Background (Urine)	End of shift (As soon as possible after exposure ceases)	2010-03-01
Cyclohexane	110-82-7	1,2-Cyclohexanediol: 50 mg/g creatinine Nonspecific (Urine)	End of shift at end of workweek	2023-01-01

Engineering measures

Adequate ventilation to control airborne concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal protective equipment

Respiratory protection : If ventilation or other engineering controls are not adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure, a supplied-air NIOSH approved respirator may be appropriate. If exposure to harmful levels of airborne material may occur, a NIOSH approved respirator that provides protection may be appropriate, such as: Air-Purifying Respirator for Organic Vapors. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, exposure levels are not known, or other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.
- Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate: Flame retardant antistatic protective clothing. Workers should wear antistatic footwear.
- Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

- Form : liquid
- Physical state : liquid
- Color : Yellow, pale
- Odor : Mild

Safety data

- Flash point : -37°C (-35°F)
Method: PMCC
- Lower explosion limit : No data available
- Upper explosion limit : No data available
- Molecular formula : Mixture
- Molecular weight : Not applicable
- pH : Not applicable
- Pour point : No data available
- Boiling point/boiling range : 33.8-204°C (92.8-399°F)
- Vapor pressure : 9.00 PSI
at 38°C (100°F)
- Relative density : 0.74
at 16 °C (61 °F)
- Water solubility : negligible
- Partition coefficient: n-octanol/water : No data available
- Viscosity, kinematic : No data available
- Relative vapor density : 3.8
(Air = 1.0)

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Evaporation rate : No data available

SECTION 10: Stability and reactivity

Reactivity : Stable under recommended storage conditions.

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

Hazardous reactions : Hazardous reactions: Vapors may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Materials to avoid : No data available.

Hazardous decomposition products : Carbon oxides

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information**UTG 96 (unleaded test gasoline)**Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method**UTG 96 (unleaded test gasoline)**Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation methodAcute toxicity estimate: 23.81 mg/l
Exposure time: 4 h
Test atmosphere: vapor
Method: Calculation method**UTG 96 (unleaded test gasoline)**Acute dermal toxicity : Acute toxicity estimate: 2,500 mg/kg
Method: Calculation method**UTG 96 (unleaded test gasoline)**

Skin irritation : May cause skin irritation in susceptible persons.

UTG 96 (unleaded test gasoline)

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Eye irritation	: Vapors may cause irritation to the eyes, respiratory system and the skin.
Sensitization	
Naphtha, Petroleum, Heavy Catalytic Cracked	: Not a skin sensitizer.
Naphtha (petroleum), light catalytic reformed	Did not cause sensitization on laboratory animals.
Hydrocarbons, C3-11, catalytic cracker distillates	Not a skin sensitizer.
Naphtha (petroleum), light alkylate	Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.
Toluene	Did not cause sensitization on laboratory animals.
Isopentane	Did not cause sensitization on laboratory animals.
2,2,4-Trimethylpentane (Isooctane)	Did not cause sensitization on laboratory animals.
Xylenes	Classification: Contains no substance or substances classified as sensitizing.
C9-C11 Isoalkanes	Not a skin sensitizer. Information given is based on data obtained from similar substances.
Isoalkanes C7-8	Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.
Cyclopentane	Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.
n-Heptane	Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.
n-hexane	Did not cause sensitization on laboratory animals.
	Does not cause skin sensitization.
1-Hexene	Did not cause sensitization on laboratory animals.
Ethylbenzene	Did not cause sensitization on laboratory animals.
Naphthalene	Classification: Did not cause sensitization on laboratory animals. Did not cause sensitization on laboratory animals.
Benzene	Did not cause sensitization on laboratory animals.
Methylcyclopentane	Did not cause sensitization on laboratory animals. Information given is based on data obtained from similar substances.
2-methyl-2-butene	Did not cause sensitization on laboratory animals.
Cyclohexane	Did not cause sensitization on laboratory animals.
n-Pentane	Did not cause sensitization on laboratory animals.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Methylcyclohexane

Did not cause sensitization on laboratory animals.

Repeated dose toxicityNaphtha, Petroleum, Heavy
Catalytic Cracked

: Species: Rat, male
 Sex: male
 Application Route: oral gavage
 Dose: 0, 500, 2000 mg/kg
 Exposure time: 28 d
 Number of exposures: once daily, 5 d/wk
 Lowest observable effect level: 500 mg/kg

Species: Rabbit, male and female
 Sex: male and female
 Application Route: Dermal
 Dose: 200, 1000, 2000 mg/kg
 Exposure time: 28 d
 Number of exposures: 3 times/wk
 NOEL: > 2,000 mg/kg
 Method: OECD Test Guideline 410

Species: Rat, male and female
 Sex: male and female
 Application Route: Inhalation
 Dose: 2000, 10000, 20000 mg/m³
 Exposure time: 90 d
 Number of exposures: 6h/d 5d/wk
 NOEL: > 20000 mg/m³
 Method: OECD Test Guideline 413

Naphtha (petroleum), light
catalytic reformed

Species: Rat
 Application Route: Inhalation
 Dose: 0, 2.00, 5.85, 20.3 mg/l
 Exposure time: 21 day
 Number of exposures: 6 h/d, 5 d/wk
 NOEL: 20.3 mg/l

Species: Rabbit
 Application Route: Dermal
 Dose: 0, 200, 1000, 2000 mg/l
 Exposure time: 28 day
 Number of exposures: 3 times/wk
 Lowest observable effect level: 1000 mg/l

Naphtha (petroleum), light
alkylate

Species: Rat, male
 Sex: male
 Application Route: oral gavage
 Dose: 500, 2000 mg/kg
 Exposure time: 4 wk
 Number of exposures: once daily, 5 d/wk
 Target Organs: Kidney
 Information given is based on data obtained from similar substances.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Species: Rabbit, male and female
Sex: male and female
Application Route: Dermal
Dose: 0, 200, 1000, 2000 mg/kg
Exposure time: 4 wk
Number of exposures: 3 times/wk
NOEL: 1,000 mg/kg
Lowest observable effect level: 2,000 mg/kg
Method: OECD Test Guideline 410
Target Organs: Skin
Information given is based on data obtained from similar substances.

Species: Rat, male and female
Sex: male and female
Application Route: Inhalation
Dose: 322, 1402, 9869 mg/m³
Exposure time: 107 - 109 wk
Number of exposures: 6 h/d 5 d/wk
NOEL: 1402 mg/m³
Method: OECD Test Guideline 453
Information given is based on data obtained from similar substances.

Species: Mouse, male and female
Sex: male and female
Application Route: Inhalation
Dose: 322, 1402, 9869 mg/m³
Exposure time: 107- 113 wk
Number of exposures: 6 h/d 5 d/wk
NOEL: 1402 mg/m³
Method: OECD Test Guideline 453
Information given is based on data obtained from similar substances.

Toluene

Species: Rat
Application Route: Inhalation
Dose: 0, 100, 625, 1250, 3000 ppm
Exposure time: 15 wk
Number of exposures: 6.5 h/d, 5 d/wk
NOEL: 625 ppm

Species: Mouse
Application Route: Inhalation
Dose: 0, 100, 625, 1250, 3000 ppm
Exposure time: 14 wk
Number of exposures: 6.5 h/d, 5 d/wk
NOEL: 100 ppm

Isopentane

Species: Rat, male and female
Sex: male and female
Application Route: Inhalation
Dose: 668, 2220, 6646 ppm
Exposure time: 13 wk
Number of exposures: 6 h/d, 5 d/wk
NOEL: > 2220 ppm
Lowest observable effect level: > = 6646 ppm
Method: OECD Guideline 413
Target Organs: Kidney
Information given is based on data obtained from similar

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	substances.
2,2,4-Trimethylpentane (Isooctane)	Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 668, 2220, 6646 ppm Exposure time: 13 weeks Number of exposures: 6 hr/day 5 d/wk NOEL: 8.117 mg/l 2220 ppm Method: OECD Guideline 413 Information given is based on data obtained from similar substances.
Xylenes	Species: Rat Application Route: oral gavage Dose: 0, 62.5, 125, 250, 500, 100... Exposure time: 13 wk Number of exposures: daily, 5 d/wk NOEL: 1,000 mg/kg Species: Rat Application Route: Inhalation Dose: 0, 180, 460, 810 ppm Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk NOEL: > 810 ppm Species: Rat Application Route: Inhalation Dose: 0, 450, 900, 1800 ppm Exposure time: 13 wk Number of exposures: 6 h/d, 6 d/wk Lowest observable effect level: 900 ppm
C9-C11 Isoalkanes	Species: Rat, male and female Sex: male and female Application Route: Inhalation Dose: 0, 2600, 5200, 10400 mg/3 Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk NOEL: > 10,400 mg/m3 Method: OECD Test Guideline 413 No significant adverse effects were reported Information given is based on data obtained from similar substances.
Isoalkanes C7-8	Species: Rat, male and female Sex: male and female Application Route: Inhalation Dose: 0, 400, 1200 ppm Exposure time: 12 wk Number of exposures: 6 hr/d, 5 d/wk NOEL: 1200 ppm Method: OECD Test Guideline 413 Target Organs: Kidney Information given is based on data obtained from similar substances.
Cyclopentane	Species: Rat, males Sex: males

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Dose: 0, 0.22, 1.12, 5.29 mg/l Exposure time: 28 d Number of exposures: 6 h/d NOEL: 1.12 mg/l Lowest observable effect level: 5.29 mg/l Method: OECD Test Guideline 412 Species: Rat, females Sex: females Dose: 0, 0.22, 1.12, 5.29 mg/l Exposure time: 28 d Number of exposures: 6 h/d NOEL: 5.29 mg/l Lowest observable effect level: > 5.29 mg/l Method: OECD Test Guideline 412 Species: Rat, male and female Sex: male and female Dose: 5, 10, 30 mg/l Exposure time: 90 d Number of exposures: 6 h/d NOEL: 30 mg/l Method: OECD Test Guideline 413 No adverse effects expected
n-Heptane	Species: Rat, male Sex: male Application Route: Inhalation Dose: 12.47 mg/l Exposure time: 16 wk Number of exposures: 12 h/d, 7 d/wk NOEL: 12.47 mg/l No adverse effect has been observed in chronic toxicity tests. Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 12.35 mg/l Exposure time: 26 wk Number of exposures: 6 h/d, 5 d/wk Method: OECD Test Guideline 413 No adverse effect has been observed in chronic toxicity tests.
n-Butane	Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 1017, 4489 ppm Exposure time: 90 day Number of exposures: 6 hr/d, 5 d/wk NOEL: 4489 ppm
n-hexane	Species: Rat, male Sex: male Application Route: Inhalation Dose: 3,000 ppm Exposure time: 16 wks Number of exposures: 12 h/d Lowest observable effect level: 3,000 ppm Target Organs: Peripheral nervous system

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

1-Hexene

Species: Mouse, female
Sex: female
Application Route: Inhalation
Dose: 500, 1,000, 4,000, 10,000 ppm
Exposure time: 13 wks
Number of exposures: 6h or 22h (1,000 ppm)/ 5d/wk
Lowest observable effect level: 500 ppm
Target Organs: Nose

Species: Mouse, male
Sex: male
Application Route: Inhalation
Dose: 500, 1,000, 4000, 10,000 ppm
Exposure time: 13 wks
Number of exposures: 6h or 22h (1,000 ppm)/d, 5d/wk
NOEL: 500 ppm
Lowest observable effect level: 1,000 ppm
Target Organs: Nose

Species: Rat, male
Sex: male
Application Route: oral gavage
Dose: 568, 1,135, 3,973 mg/kg bw/day
Exposure time: 90 or 120 days
Number of exposures: Daily or 5d/wk (120-d study)
NOEL: 568 mg/kg bw/day
Lowest observable effect level: 1135 mg/kg bw/day

Species: Rat, male
Sex: male
Application Route: oral gavage
Dose: 0, 10, 101, 1010, 3365 mg/kg
Exposure time: 28 day
Number of exposures: daily
NOEL: 101 mg/kg
Lowest observable effect level: 1,010 mg/kg
Test substance: yes
Method: OECD Test Guideline 407

Species: Rat, female
Sex: female
Application Route: oral gavage
Dose: 0, 10, 101, 1010, 3365 mg/kg
Exposure time: 28 day
Number of exposures: daily
NOEL: 1,010 mg/kg
Lowest observable effect level: 3,365 mg/kg
Test substance: yes
Method: OECD Test Guideline 407

Species: Rat
Application Route: Inhalation
Dose: 0, 300, 1000, 3000 ppm
Exposure time: 90 day
Number of exposures: 6 h/d, 5 d/wk, 13 wk
NOEL: 3000 ppm
Test substance: yes

Ethylbenzene

Species: Rat, male
Sex: male

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Benzene

Application Route: Inhalation
Dose: 200, 400, 600, 800 ppm
Exposure time: 13 weeks
Number of exposures: 6 hours/day, 6 days/week
NOEL: 200 ppm
Test substance: yes
Target Organs: Ototoxicity

Species: Rat, female
Sex: female
Application Route: oral gavage
Dose: 0, 25, 50, 100 mg/kg
Exposure time: 103 wk
Number of exposures: 5 d/wk
NOEL: < 25 mg/kg
Lowest observable effect level: 25 mg/kg

Species: Rat, male
Sex: male
Application Route: oral gavage
Dose: 0, 50, 100, 200 mg/kg
Exposure time: 103 wk
Number of exposures: 5 d/wk
NOEL: < 50 mg/kg
Lowest observable effect level: 50 mg/kg

Species: Mouse
Application Route: oral gavage
Dose: 0, 25, 50, 100 mg/kg
Exposure time: 103 wk
NOEL: < 25 mg/kg

2-methyl-2-butene

Species: Rat, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 580, 2000, 7000 ppm
Exposure time: 4 wk
Number of exposures: 6 h/d, 7 d/wk
NOEL: 580 ppm
Method: OECD Guideline 422

Cyclohexane

Species: Rat
Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Exposure time: 90 day
Number of exposures: 6 h/d, 5 d/wk
NOEL: 2000 ppm

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Species: Rat, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 500, 2,000, 7000 ppm Exposure time: 13-14 wk Number of exposures: 6 hr/d, 5 d/wk NOEL: 7000 ppm Species: Mouse, Male and female Sex: Male and female Application Route: Inhalation Dose: 0, 500, 2000, 7000 ppm Exposure time: 13-14 wk Number of exposures: 6 hr/d, 5 d/wk NOEL: 2000 ppm Target Organs: Blood
2,3-Dimethylbutane	Species: Rat Application Route: oral gavage Dose: 0, 500, 2000 mg/kg Exposure time: 4 wk Number of exposures: once a day, 5 d/wk Lowest observable effect level: 500 mg/kg Target Organs: Kidney
n-Pentane	Species: Rat, Male and female Sex: Male and female Application Route: inhalation (gas) Dose: 0, 5000, 10,000, 20,000 mg/m³ Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk NOEL: 20,000 mg/m³ Method: OECD Test Guideline 413
Methylcyclohexane	Species: Rat, male Sex: male Application Route: oral gavage Dose: 62.5, 250, 1000 mg/kg Exposure time: 28 d Number of exposures: daily, 7d/wk NOEL: 250 mg/kg Lowest observable effect level: 1,000 mg/kg Method: OECD Guideline 422 Species: Rat, female Sex: female Application Route: oral gavage Dose: 62.5, 250, 1000 mg/kg Exposure time: 46 d Number of exposures: daily, 7 d/wk NOEL: 250 mg/kg Lowest observable effect level: 1,000 mg/kg Method: OECD Guideline 422
Isoprene	Species: Rat Application Route: Inhalation Dose: 0. 70, 220, 700, 2200, 7000... Exposure time: 13 wk Number of exposures: 6 h/d, 5 d/wk NOEL: 7000 ppm

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Species: Mouse
 Application Route: Inhalation
 Dose: 0, 70, 220, 700, 2200, 7000...
 Exposure time: 13 wk
 Number of exposures: 6 h/d, 5 d/wk
 Lowest observable effect level: 70 ppm

Genotoxicity in vitro

Naphtha, Petroleum, Heavy
 Catalytic Cracked

: Test Type: Mouse lymphoma assay
 Result: positive

Naphtha (petroleum), light
 catalytic reformed

Test Type: Ames test
 Result: negative

Test Type: Cytogenetic assay
 Result: negative

Hydrocarbons, C3-11,
 catalytic cracker distillates

Result: May cause genetic defects.
 Remarks: In vitro tests showed mutagenic effects

Naphtha (petroleum), light
 alkylate

Test Type: Mouse lymphoma assay
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 476
 Result: negative
 Remarks: Information given is based on data obtained from similar substances.

Test Type: Sister chromatid exchange
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 479
 Result: negative
 Remarks: Information given is based on data obtained from similar substances.

Test Type: Ames test
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 471
 Result: negative
 Remarks: Information given is based on data obtained from similar substances.

Toluene

Test Type: Ames test
 Result: negative

Test Type: Sister Chromatid Exchange Assay
 Result: negative

Test Type: Mouse lymphoma assay
 Result: negative

Test Type: Cytogenetic assay
 Result: negative

Isopentane

Test Type: Ames test
 Concentration: 1, 2, 5, 8, 10%
 Metabolic activation: with and without metabolic activation
 Method: OECD Test Guideline 471

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Result: negative

Test Type: Ames test

Concentration: 1, 2, 5, 8, 10, 25, 50%

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 471

Result: negative

Remarks: Information given is based on data obtained from similar substances.

Test Type: Chromosome aberration test in vitro

Metabolic activation: with and without metabolic activation

Method: Mutagenicity (in vitro mammalian cytogenetic test)

Result: negative

Remarks: Information given is based on data obtained from similar substances.

Test Type: In vitro mammalian cell gene mutation test

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Remarks: Information given is based on data obtained from similar substances.

2,2,4-Trimethylpentane
(Isooctane)

Test Type: Ames test

Method: Mutagenicity (Escherichia coli - reverse mutation assay)

Result: negative

Test Type: Mouse lymphoma assay

Method: OECD Guideline 476

Result: negative

Test Type: Sister Chromatid Exchange Assay

Result: negative

Test Type: Unscheduled DNA synthesis assay

Result: negative

Xylenes

Test Type: Ames test

Result: negative

Test Type: Mouse lymphoma assay

Result: negative

C9-C11 Isoalkanes

Test Type: E. Coli bacterial reverse mutation assay

Result: negative

Remarks: Information given is based on data obtained from similar substances.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative Remarks: Information given is based on data obtained from similar substances. Test Type: Bacterial DNA repair test Result: negative Remarks: Information given is based on data obtained from similar substances.
Isoalkanes C7-8	Test Type: Ames test Result: negative
Cyclopentane	Test Type: Modified Ames test Concentration: 1250 microgram/plate Metabolic activation: with and without metabolic activation Result: negative Test Type: Mouse lymphoma assay Concentration: 200 microgram/mililiter Metabolic activation: with and without metabolic activation Result: negative
n-Heptane	Test Type: Ames test Method: Mutagenicity (Escherichia coli - reverse mutation assay) Result: negative Test Type: Mammalian cell gene mutation assay Method: OECD Guideline 476 Result: negative Test Type: Chromosome aberration test in vitro Method: OECD Guideline 473 Result: negative Test Type: Mitotic recombination Result: negative
n-Butane	Test Type: Ames test Result: negative
n-hexane	Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: Positive results were obtained in some in vitro tests.
1-Hexene	Test Type: Ames test Metabolic activation: with and without metabolic activation
SDS Number:100000013939	
24/63	

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Method: Mutagenicity (Escherichia coli - reverse mutation assay) Result: negative
	Test Type: Unscheduled DNA synthesis assay Result: negative
	Test Type: Mouse lymphoma assay Result: negative
	Test Type: Chromosome aberration test in vitro Method: OECD Guideline 473 Result: negative
Ethylbenzene	Test Type: Ames test Result: negative
	Test Type: Unscheduled DNA synthesis assay Result: negative
2,2-Dimethylbutane	Test Type: Ames test Result: negative
Naphthalene	Test Type: Ames test Result: negative
	Test Type: Sister Chromatid Exchange Assay Result: negative
	Test Type: Unscheduled DNA synthesis assay Result: negative
Benzene	Test Type: Ames test Result: negative
	Test Type: Cytogenetic assay Result: positive
	Test Type: Mouse lymphoma assay Result: positive
	Test Type: Sister Chromatid Exchange Assay Result: negative
2-methyl-2-butene	Test Type: Ames test Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative
	Method: OECD Test Guideline 480 Result: negative
Cyclohexane	Test Type: Ames test Metabolic activation: with and without metabolic activation Method: Mutagenicity (Escherichia coli - reverse mutation assay) Result: negative

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Result: negative Test Type: Mouse lymphoma assay Metabolic activation: with and without metabolic activation Method: OECD Guideline 476 Result: negative
2,3-Dimethylbutane	Test Type: Ames test Result: negative
n-Pentane	Test Type: Ames test Metabolic activation: with and without metabolic activation Result: negative
	Test Type: Chromosome aberration test in vitro Metabolic activation: with and without metabolic activation Result: Ambiguous
Isoprene	Test Type: Ames test Result: negative Test Type: Sister Chromatid Exchange Assay Result: positive
Genotoxicity in vivo	
Naphtha (petroleum), light catalytic reformed	: Test Type: Cytogenetic assay Result: negative
Hydrocarbons, C3-11, catalytic cracker distillates	Result: May cause genetic defects.
Naphtha (petroleum), light alkylate	Test Type: In vivo micronucleus test Species: Rat Cell type: Bone marrow Dose: 2000, 10,000, 20,000 mg/m3 Method: OECD Test Guideline 475 Result: negative Remarks: Information given is based on data obtained from similar substances.
Toluene	Test Type: Cytogenetic assay Result: negative Test Type: Mouse micronucleus assay Result: negative
Isopentane	Test Type: In vivo micronucleus test Species: Rat Cell type: Bone marrow Route of Application: inhalation (vapor) Exposure time: 13 wk Dose: 5000, 10,000, 20,000 mg/m3 Method: Directive 67/548/EEC, Annex V, B.12. Remarks: Information given is based on data obtained from similar substances.
2,2,4-Trimethylpentane	Test Type: Unscheduled DNA synthesis assay

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

(Isooctane)	Species: Mouse Dose: 500 mg/kg Result: negative Test Type: Unscheduled DNA synthesis assay Species: Rat Dose: 500 mg/kg Result: negative
Xylenes	Test Type: Mouse micronucleus assay Result: negative
C9-C11 Isoalkanes	Test Type: Dominant lethal assay Result: negative Remarks: Information given is based on data obtained from similar substances. Test Type: Mouse micronucleus assay Result: negative Remarks: Information given is based on data obtained from similar substances.
Cyclopentane	Test Type: Micronucleus test Species: Mouse Route of Application: inhalation (vapor) Dose: 10,000 ppm Result: negative
n-hexane	Test Type: Dominant lethal assay Species: Mouse Dose: 100 and 400 ppm Result: negative Test Type: Cytogenetic assay Species: Rat Dose: 900, 3000, 9000 ppm Result: negative
1-Hexene	Test Type: Mouse micronucleus assay Species: Mouse Method: Mutagenicity (micronucleus test) Result: negative
Ethylbenzene	Test Type: Mouse micronucleus assay Species: Mouse Result: negative
Naphthalene	Test Type: Mouse micronucleus assay Result: negative
Benzene	Test Type: Mouse micronucleus assay Result: positive
2-methyl-2-butene	Test Type: Mouse micronucleus assay Species: Rat Cell type: Bone marrow Route of Application: Inhalation Exposure time: 6 h/d 2d Method: OECD Test Guideline 474 Result: positive

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Cyclohexane

Test Type: Cytogenetic assay
 Species: Rat
 Cell type: Bone marrow
 Dose: 96.6, 307.2, 10141.6 ppm
 Result: negative

n-Pentane

Test Type: Micronucleus test
 Species: Rat
 Cell type: Bone marrow
 Result: negative

Isoprene

Result: negative

Test Type: Micronucleus test
 Result: positive

CarcinogenicityNaphtha, Petroleum, Heavy
Catalytic Cracked

: Species: Mouse
 Sex: male
 Dose: 0, 0.05 ml
 Exposure time: 2 yrs
 Number of exposures: 3 times/wk
 Print Date: OECD Test Guideline 451
 Remarks: no increase incidence of tumors

Hydrocarbons, C3-11,
catalytic cracker distillates

Species: Rat
 Exposure time: 2 years
 Print Date: OECD Test Guideline 451

Toluene

Species: Rat
 Dose: 0, 600, 1200 ppm
 Exposure time: 2 yrs
 Number of exposures: 6.5 h/d, 5 d/wk
 Remarks: No evidence of carcinogenicity

Species: Mouse
 Dose: 0, 600, 1200 ppm
 Exposure time: 2 yrs
 Number of exposures: 6.5 h/d, 5 d/wk
 Remarks: No evidence of carcinogenicity

Xylenes

Species: Rat
 Dose: 0, 250, 500 mg/kg
 Exposure time: 103 wks
 Number of exposures: 5 d/wk
 Remarks: No evidence of carcinogenicity

Species: Mouse
 Dose: 0, 500, 1000 mg/kg
 Exposure time: 103 wks
 Number of exposures: 5 d/wk
 Remarks: No evidence of carcinogenicity

n-hexane

Species: Rat
 Dose: 0.043, 900, 3,000, 9,016 ppm
 Exposure time: 2 yrs
 Number of exposures: 6 h/d, 5 d/wk

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Naphthalene

Remarks: No evidence of carcinogenicity, Information given is based on data obtained from similar substances.

Species: Mouse

Sex: male and female

Dose: 0.039, 900, 3,000, 9,018 ppm

Exposure time: 2 yrs

Number of exposures: 6 h/d, 5 d/wk

Remarks: No evidence of carcinogenicity, Information given is based on data obtained from similar substances.

Species: Mouse

Sex: male

Dose: 10, 30 ppm

Exposure time: 105 weeks

Number of exposures: 6 hours/day, 5 days/week

Test substance: yes

Print Date: No information available.

Remarks: No evidence of carcinogenicity

Species: Mouse

Sex: female

Dose: 10, 30 ppm

Exposure time: 105 weeks

Number of exposures: 6 hours/day, 5 days/week

Test substance: yes

Print Date: No information available.

Remarks: increased incidence of alveolar/bronchiolar adenomas

Species: Rat

Sex: male and female

Dose: 10, 30, 60 ppm

Exposure time: 105 weeks

Number of exposures: 6 hours/day, 5 days/week

Test substance: yes

Print Date: No information available.

Remarks: nose respiratory epithelial adenoma, increased incidence of olfactory neuroblastomas

Benzene

Species: Rat

Sex: female

Dose: 0, 25, 50, 250 mg/kg

Exposure time: 103 wks

Number of exposures: daily, 5 days/week

Test substance: yes

Remarks: zymbal gland carcinomas, squamous cell papillomas

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Species: Rat Sex: male Dose: 0, 50, 100, 200 mg/kg Exposure time: 103 wks Number of exposures: daily, 5 days/week Test substance: yes Remarks: zymbal gland carcinomas, squamous cell papillomas Species: Mouse Sex: male and female Dose: 25, 50, 100 mg/kg Exposure time: 103 wks Number of exposures: daily, 5 days/week Test substance: yes Remarks: Clear evidence of multiple organ carcinogenicity.
Isoprene	Species: Rat Dose: 0, 70, 220, 700, 220, 7000 ppm Exposure time: 26 wks Number of exposures: 6 h/d, 5 d/wk Remarks: interstitial cell hyperplasia of testis at 7000 ppm Species: Mouse Dose: 0, 70, 220, 700, 220, 7000 ppm Exposure time: 26 wks Number of exposures: 6 h/d, 5 d/wk Remarks: malignant neoplastic lesions in the liver, lung, fore stomach and Harderian gland at 700 ppm
Reproductive toxicity	
Hydrocarbons, C3-11, catalytic cracker distillates	: Species: Rat Sex: male and female Application Route: inhalation (vapor) Dose: 0, 5000, 10000, 20000 mg/m3 Method: OECD Test Guideline 416 NOAEL Parent: > 20,000 mg/m3 NOAEL F1: > 20,000 mg/m3
Naphtha (petroleum), light alkylate	Species: Rat Sex: male and female Application Route: Inhalation Dose: 5,000, 10,000, 20,000 mg/L Number of exposures: 6 h/d, 7 d/wk Method: OECD Test Guideline 416 NOAEL Parent: 24.7 mg/l NOAEL F1: 24.7 mg/l No adverse effects expected Information given is based on data obtained from similar substances.
Toluene	Species: Rat Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm Test period: 95 d NOAEL Parent: 2000 ppm
Isopentane	Species: Rat

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Sex: male and female Application Route: inhalation (vapor) Dose: 0, 500, 2000, 7000 ppm Number of exposures: 6 h/d 5 d/wk Method: OECD Test Guideline 416 NOAEL Parent: 7000 ppm NOAEL F1: 2000 ppm NOAEL F2: 2000 ppm Information given is based on data obtained from similar substances. Reduced fetal weight.
2,2,4-Trimethylpentane (Isooctane)	Species: Rat Sex: male and female Application Route: Inhalation Dose: 0, 900, 3000, 9000 ppm Number of exposures: 6 h/d 5 d/wk Method: OECD Test Guideline 416 NOAEL Parent: 3000 ppm NOAEL F1: 3000 ppm NOAEL F2: 3000 ppm Information given is based on data obtained from similar substances.
Isoalkanes C7-8	Species: Rat Sex: male and female Application Route: inhalation (vapor) Number of exposures: 6 hr/d; 5 d/wk Method: OECD Test Guideline 416 NOAEL Parent: 10,560 mg/m³ NOAEL F1: 31,680 mg/m³ NOAEL F2: 31,680 mg/m³ Fertility and developmental toxicity tests did not reveal any effect on reproduction. Information given is based on data obtained from similar substances.
Cyclopentane	Species: Rat Sex: males Application Route: Inhalation Dose: 0, 500, 2000, 7000 ppm Number of exposures: 6 h/day NOAEL Parent: 2000 ppm NOAEL F1: 2000 ppm NOAEL F2: 2000 ppm Reduced fetal weight. Information given is based on data obtained from similar substances.
n-Heptane	Species: Rat Sex: male and female Application Route: Inhalation Dose: 0, 900, 3000, 9000 ppm Number of exposures: 6 hr/d, 5 d/wk Test period: 13 wk Method: OECD Test Guideline 416 NOAEL Parent: 3000ppm NOAEL F1: 3000 ppm NOAEL F2: 3000 ppm Information given is based on data obtained from similar

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

substances.

n-hexane

Species: Rat
Sex: male
Application Route: Inhalation
Dose: 5,000 ppm
Number of exposures: 16 hr/d, 6 d/wk
Test period: 6 wks
permanent testicular damage characterized by loss of germ-cell line

1-Hexene

Species: Rat
Sex: males
Application Route: oral gavage
Dose: 0, 100, 500, 1000 mg/kg
Number of exposures: daily
Test period: 44 d
Test substance: yes
Method: OECD Guideline 421
NOAEL Parent: 1,000 mg/kg
NOAEL F1: 1,000 mg/kg

Species: Rat
Sex: females
Application Route: oral gavage
Dose: 0, 100, 500, 1000 mg/kg
Number of exposures: daily
Test period: 41-51 d
Test substance: yes
Method: OECD Guideline 421
NOAEL Parent: 1,000 mg/kg
NOAEL F1: 1,000 mg/kg

2-methyl-2-butene

Species: Rat
Sex: male and female
Application Route: Inhalation
Dose: 580, 2000, 7000 ppm
Number of exposures: 6 h/d, 7 d/wk
Test period: 4 wks
Method: OECD Guideline 422
NOAEL Parent: 7000 ppm
NOAEL F1: 7000 ppm
no abnormalities observed

Cyclohexane

Species: Rat
Application Route: Inhalation
Dose: 0, 500, 2000, 7000 ppm
Number of exposures: 6 hr/d, 5 d/wk
Method: OECD Test Guideline 416
NOAEL Parent: 500 ppm
NOAEL F1: 7000 ppm
NOAEL F2: 7000 ppm

n-Pentane

Species: Rat
Sex: male
Application Route: Inhalation
Dose: 0, 5, 10, 20 mg/l
Exposure time: 13 wk
Test period: 6hrs/day, 5 days/wk
NOAEL Parent: 20 mg/l

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

no abnormalities observed

Species: Rat
Sex: female
Application Route: Inhalation
Dose: 0, 5, 10, 20 mg/l
Exposure time: 13 wk
Test period: 6hrs/day, 5days/wk
NOAEL Parent: 20 mg/l
no abnormalities observed

Methylcyclohexane

Species: Rat
Sex: male
Application Route: oral gavage
Dose: 62.5, 250, 1000 mg/kg
Number of exposures: daily, 7 d/wk
Test period: 28
Method: OECD Guideline 422
NOAEL Parent: 1,000 mg/kg
NOAEL F1: 1,000 mg/kg

Species: Rat
Sex: female
Application Route: oral gavage
Dose: 62.5, 250, 1000 mg/kg
Number of exposures: daily, 7 d/wk
Test period: 46
Method: OECD Guideline 422
NOAEL Parent: 1,000 mg/kg
NOAEL F1: 1,000 mg/kg

Species: Rat
Sex: male and female
Application Route: inhalation (vapor)
Dose: 500, 2000, 7000 ppm
Number of exposures: daily, 7 d/wk
Test period: 28
Method: OECD Test Guideline 416
NOAEL Parent: 500 ppm
NOAEL F1: 500 ppm
NOAEL F2: 2000 ppm
Information given is based on data obtained from similar substances.

Developmental Toxicity

Hydrocarbons, C3-11,
catalytic cracker distillates

: Species: Rat
Exposure time: GD6-GD19
Number of exposures: 6 h/d
Test period: Day 20 of Gestation
Method: OECD Guideline 414
NOAEL Teratogenicity: 23900 mg/m3
NOAEL Maternal: 23900 mg/m3

Naphtha (petroleum), light
alkylate

Species: Rat
Application Route: Dermal
Dose: 30, 125, 500 mg/kg/d
Exposure time: GD 0 - 19
Number of exposures: Daily

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Test period: 19 d NOAEL Teratogenicity: 500 mg/kg NOAEL Maternal: 500 mg/kg Animal testing did not show any effects on fetal development. Information given is based on data obtained from similar substances.
Toluene	Species: Rat Application Route: Inhalation Dose: 0, 100, 500, 2000 ppm Test period: 95 d NOAEL Teratogenicity: 400-750 ppm
Isopentane	Species: Rat Application Route: oral gavage Dose: 0, 100, 500, 1000 mg/kg/d Exposure time: GD 6-15 Number of exposures: daily Method: OECD Guideline 414 NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 1,000 mg/kg Information given is based on data obtained from similar substances.
	Species: Rat Application Route: Inhalation Dose: 0, 500, 2000, 7000 ppm Exposure time: GD 6-15 Number of exposures: 5 d/wk Method: OECD Guideline 414 NOAEL Teratogenicity: 7000 ppm NOAEL Maternal: 500 - 2000 ppm Information given is based on data obtained from similar substances.
	Species: Rabbit Application Route: Inhalation Dose: 0, 500, 2000, 7000 ppm Exposure time: GD 6-18 Method: OECD Guideline 414 NOAEL Teratogenicity: 7000 ppm NOAEL Maternal: 7000 ppm Information given is based on data obtained from similar substances.
2,2,4-Trimethylpentane (Isooctane)	Species: Rat Application Route: Inhalation Dose: 0, 400, 1200 ppm Number of exposures: 6h/d Test period: GD6-15 NOAEL Teratogenicity: 1200 ppm NOAEL Maternal: 1200 ppm Information given is based on data obtained from similar substances.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Species: Rat Application Route: Inhalation Dose: 0, 900, 3000, 9000 ppm Number of exposures: 6h/d Test period: GD6-15 Method: OECD Guideline 414 NOAEL Teratogenicity: 9000 ppm NOAEL Maternal: 3000 ppm Information given is based on data obtained from similar substances.
Xylenes	Species: Rat Application Route: Inhalation Dose: 0, 805, 1610 ppm Number of exposures: 6 h/d Test period: GD 7-16 NOAEL Maternal: 1610 ppm Species: Mouse Application Route: oral gavage Dose: 0, 780, 1960, 2619 mg/kg Number of exposures: 3 times/d Test period: GD 6-15 NOAEL Teratogenicity: 780 mg/kg NOAEL Maternal: 780 mg/kg
C9-C11 Isoalkanes	Species: Rat Application Route: Inhalation Dose: 0, 291, 817 ppm Number of exposures: 6 h/d Test period: GD 6-15 NOAEL Teratogenicity: > 817 ppm NOAEL Maternal: > 817 ppm
Isoalkanes C7-8	Species: Rat Application Route: Inhalation Dose: 500, 2000, 7000 ppm Exposure time: 6 hr/d Test period: GD 6-15 Method: OECD Guideline 414 NOAEL Teratogenicity: > 21,000 mg/m3 NOAEL Maternal: > 21,000 mg/m3 Animal testing did not show any effects on fetal development. Information given is based on data obtained from similar substances.
Cyclopentane	Species: Rat Application Route: oral gavage Dose: 0, 100, 500, 1000 mg/kg Exposure time: GD 6 - 15 Number of exposures: daily NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 1,000 mg/kg Information given is based on data obtained from similar substances.
n-Heptane	Species: Rat Application Route: Inhalation Dose: 0, 900, 3000, 9000 ppm Exposure time: GD6-15

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Number of exposures: 6 hrs/d NOAEL Teratogenicity: 9000 ppm NOAEL Maternal: 3000 ppm
n-hexane	Species: Rat Application Route: Inhalation Dose: 200, 1,000, 5,000 ppm Number of exposures: 20 hr/d, daily Test period: GD 6-20 NOAEL Teratogenicity: 200 ppm NOAEL Maternal: 200 ppm
Naphthalene	Species: Mouse Application Route: Inhalation Dose: 200, 1,000, 5,000 ppm Number of exposures: 20 hr/d, daily Test period: GD 6-17 NOAEL Maternal: 1,000 ppm Species: Rabbit Application Route: oral gavage Dose: 40, 200, 400 mg/kg Test period: 29 d, GD 6-18 NOAEL Teratogenicity: 400 mg/kg
2-methyl-2-butene	Species: Rat Application Route: Inhalation Dose: 500, 2000, 8000 ppm Exposure time: 6 h/d Test period: Days 5 -21 Method: OECD Guideline 414 NOAEL Teratogenicity: 8000 ppm NOAEL Maternal: 8000 ppm Information given is based on data obtained from similar substances. Animal testing did not show any effects on fetal development.
Cyclohexane	Species: Rat Application Route: Inhalation Dose: 0, 500, 2,000, 7,000 PPM Number of exposures: 6 hr/d Test period: GD 6-15 Method: OECD Guideline 414 NOAEL Teratogenicity: 7,000 ppm NOAEL Maternal: 500 ppm Species: Rabbit Application Route: Inhalation Dose: 0, 500, 2,000, 7,000 PPM Number of exposures: 6 hr/d Test period: GD 6-18 Method: OECD Guideline 414 NOAEL Teratogenicity: 7,000 ppm NOAEL Maternal: 500 ppm
n-Pentane	Species: Rat Application Route: Inhalation Dose: 0, 1000, 3000, 10000 ppm Number of exposures: 6 h/d Test period: GD 6-15

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Methylcyclohexane

NOAEL Teratogenicity: 10,000 ppm

Species: Rat

Application Route: Inhalation

Dose: 500, 2000, 7000 ppm

Number of exposures: 6 hr/d, 7 d/wk

Test period: GD 7 - 16

Method: OECD Guideline 414

NOAEL Teratogenicity: 7000 ppm

NOAEL Maternal: 500 ppm

Information given is based on data obtained from similar substances.

Species: Rabbit

Application Route: Inhalation

Dose: 500, 2000, 7000 ppm

Number of exposures: 6 hr/d, 7 d/wk

Test period: GD 6 - 18

Method: OECD Guideline 414

NOAEL Teratogenicity: 7000 ppm

NOAEL Maternal: 500 ppm

Information given is based on data obtained from similar substances.

Aspiration toxicity

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Naphtha, Petroleum, Heavy Catalytic Cracked	: May be fatal if swallowed and enters airways.
Naphtha (petroleum), light catalytic reformed	May be fatal if swallowed and enters airways.
Hydrocarbons, C3-11, catalytic cracker distillates	May be fatal if swallowed and enters airways.
Naphtha (petroleum), light alkylate	May be fatal if swallowed and enters airways.
Toluene	May be fatal if swallowed and enters airways.
Isopentane	May be fatal if swallowed and enters airways.
3,3-Dimethylpentane	May be fatal if swallowed and enters airways.
2,2,4-Trimethylpentane (Isooctane)	May be fatal if swallowed and enters airways.
Xylenes	May be fatal if swallowed and enters airways.
C9-C11 Isoalkanes	May be fatal if swallowed and enters airways.
Isoalkanes C7-8	May be fatal if swallowed and enters airways.
Heptane, branched, cyclic and linear	May be fatal if swallowed and enters airways.
Cyclopentane	May be fatal if swallowed and enters airways.
n-Heptane	May be fatal if swallowed and enters airways.
n-hexane	May be fatal if swallowed and enters airways.
1-Hexene	May be fatal if swallowed and enters airways.
Ethylbenzene	May be fatal if swallowed and enters airways.
1,2,4-Trimethylbenzene	May be fatal if swallowed and enters airways.
2,2-Dimethylbutane	May be fatal if swallowed and enters airways.
2-Methylpentane	May be fatal if swallowed and enters airways.
Benzene	May be fatal if swallowed and enters airways.
3-Methylpentane	May be fatal if swallowed and enters airways.
2-Methylhexane	May be fatal if swallowed and enters airways.
Methylcyclopentane	May be fatal if swallowed and enters airways.
3-Methylhexane	May be fatal if swallowed and enters airways.
2-methyl-2-butene	May be fatal if swallowed and enters airways.
Cyclohexane	May be fatal if swallowed and enters airways.
2,3-Dimethylbutane	May be fatal if swallowed and enters airways.
2,3-Dimethylpentane	May be fatal if swallowed and enters airways.
2,4-Dimethylpentane	May be fatal if swallowed and enters airways.
n-Pentane	May be fatal if swallowed and enters airways.
Methylcyclohexane	May be fatal if swallowed and enters airways.
2,3,4-Trimethylpentane	May be fatal if swallowed and enters airways.
Isoprene	May be fatal if swallowed and enters airways.

CMR effects

Naphtha, Petroleum, Heavy Catalytic Cracked	: Carcinogenicity: Possible human carcinogen Mutagenicity: In vivo tests showed mutagenic effects Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
Naphtha (petroleum), light catalytic reformed	Carcinogenicity: Possible human carcinogen Mutagenicity: In vivo tests showed mutagenic effects Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
Hydrocarbons, C3-11, catalytic cracker distillates	Carcinogenicity: Human carcinogen. Mutagenicity: In vivo tests showed mutagenic effects Teratogenicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
Toluene	Carcinogenicity: Not classifiable as a human carcinogen. Mutagenicity: Animal testing did not show any mutagenic effects. Teratogenicity: Some evidence of adverse effects on development, based on animal experiments. Reproductive toxicity: Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.
Isopentane	Carcinogenicity: Not available Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., In vivo tests did not show mutagenic effects Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
2,2,4-Trimethylpentane (Isooctane)	Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
Xylenes	Carcinogenicity: Not classifiable as a human carcinogen. Mutagenicity: Did not show mutagenic effects in animal experiments. Teratogenicity: Damage to fetus not classifiable
Isoalkanes C7-8	Carcinogenicity: Not available Mutagenicity: In vitro tests did not show mutagenic effects Reproductive toxicity: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.
n-Heptane	Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: No toxicity to reproduction
n-Butane	Carcinogenicity: Weight of evidence does not support classification as a carcinogen Mutagenicity: Weight of evidence does not support classification as a germ cell mutagen. Teratogenicity: Not available Reproductive toxicity: Weight of evidence does not support classification for reproductive toxicity
n-hexane	Carcinogenicity: Not classifiable as a human carcinogen. Mutagenicity: Did not show mutagenic effects in animal experiments. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Some evidence of adverse effects on

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	sexual function and fertility, and/or on development, based on animal experiments.
1-Hexene	Carcinogenicity: Not available Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
Ethylbenzene	Carcinogenicity: Weight of evidence does not support classification as a carcinogen Mutagenicity: In vivo tests did not show mutagenic effects Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: No toxicity to reproduction
Naphthalene	Carcinogenicity: Limited evidence of carcinogenicity in animal studies
Benzene	Carcinogenicity: Human carcinogen. Mutagenicity: In vivo tests showed mutagenic effects Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: Animal testing did not show any effects on fertility.
2-methyl-2-butene	Carcinogenicity: Limited evidence of carcinogenicity in animal studies Mutagenicity: In vitro tests showed mutagenic effects Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
Cyclohexane	Carcinogenicity: Weight of evidence does not support classification as a carcinogen Mutagenicity: Did not show mutagenic effects in animal experiments. Teratogenicity: Did not show teratogenic effects in animal experiments. Reproductive toxicity: No toxicity to reproduction
Methylcyclohexane	Carcinogenicity: Not available Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Teratogenicity: Animal testing did not show any effects on fetal development. Reproductive toxicity: Animal testing did not show any effects on fertility.
Isoprene	Carcinogenicity: Possible human carcinogen Mutagenicity: In vitro tests showed mutagenic effects

UTG 96 (unleaded test gasoline)**Further information**

: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

may degrease the skin.

SECTION 12: Ecological information**Toxicity to fish**

Naphtha, Petroleum, Heavy Catalytic Cracked	: LL50: 10 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203
Naphtha (petroleum), light catalytic reformed	LL50: 8.2 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow) semi-static test
Hydrocarbons, C3-11, catalytic cracker distillates	1 - 100 mg/l Toxic to fish.
Naphtha (petroleum), light alkylate	LL50: 8.2 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow) semi-static test
Toluene	LC50: 18 - 36 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)
Isopentane	LC50: 4.26 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203 Information given is based on data obtained from similar substances.
	LL50: 34.3 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
2,2,4-Trimethylpentane (Isooctane)	LC50: 0.11 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203 Information given is based on data obtained from similar substances.
Xylenes	LC50: 8.2 mg/l Exposure time: 96 h Species: Salmo gairdneri (Rainbow trout)
C9-C11 Isoalkanes	LL50: 3.6 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203 Information given is based on data obtained from similar substances.
Isoalkanes C7-8	LL50: 3 - 10 mg/l

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Exposure time: 96 h Species: <i>Oncorhynchus mykiss</i> (rainbow trout) Method: OECD Test Guideline 203 Information given is based on data obtained from similar substances.
Cyclopentane	LL50: 29.3 mg/l Exposure time: 96 h Species: Fish Method: QSAR modeled data
n-Heptane	LL50: 5.738 mg/l Exposure time: 96 h Species: <i>Oncorhynchus mykiss</i> (rainbow trout) Method: QSAR modeled data
n-hexane	LL50: 12.51 mg/l Exposure time: 96 h Species: <i>Oncorhynchus mykiss</i> (rainbow trout) Method: QSAR modeled data
1-Hexene	LC50: 5.6 mg/l Exposure time: 96 h Species: <i>Oncorhynchus mykiss</i> (rainbow trout) semi-static test Test substance: yes Method: OECD Test Guideline 203
Ethylbenzene	LC50: 4.3 mg/l Exposure time: 96 h Species: <i>Marone saxatilis</i> (striped bass)
Naphthalene	LC50: 3.2 mg/l Exposure time: 96 h Species: <i>Pimephales promelas</i> (fathead minnow)
Benzene	LC50: 5.3 mg/l Exposure time: 96 h Species: <i>Oncorhynchus mykiss</i> (rainbow trout) flow-through test Test substance: yes Method: OECD Test Guideline 203
3-Methylpentane	No data available
Methylcyclopentane	LL50: 18.27 mg/l Exposure time: 96 h Species: Fish Method: QSAR
2-methyl-2-butene	LC50: 4.99 mg/l Exposure time: 96 h Species: <i>Oncorhynchus mykiss</i> (rainbow trout) semi-static test Method: OECD Test Guideline 203
Cyclohexane	LC50: 4.53 mg/l Exposure time: 96 h Species: <i>Pimephales promelas</i> (fathead minnow) Method: OECD Test Guideline 203
2,3-Dimethylbutane	LC50: 6.68 mg/l Exposure time: 96 h

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Species: Fish Method: QSAR modeled data
n-Pentane	LL50: 10.6 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
Methylcyclohexane	LC50: 2.07 mg/l Exposure time: 96 h Species: Fish semi-static test
Isoprene	LC50: 7.43 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

Naphtha, Petroleum, Heavy Catalytic Cracked	: EL50: 4.5 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202
Hydrocarbons, C3-11, catalytic cracker distillates	1 - 100 mg/l Toxic effects on fish and plankton
Naphtha (petroleum), light alkylate	EL50: 4.5 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202
Toluene	EC50: 3.78 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea)
Isopentane	EC50: 2.3 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202
	EL50: 59.9 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
2,2,4-Trimethylpentane (Isooctane)	EC50: 0.4 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Information given is based on data obtained from similar substances.
C9-C11 Isoalkanes	EL50: 22 - 46 mg/l

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202 Information given is based on data obtained from similar substances.
Isoalkanes C7-8	EL50: 4.6 - 10 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202 Information given is based on data obtained from similar substances.
Cyclopentane	EC50: 2.3 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Information given is based on data obtained from similar substances.
n-Heptane	EC50: 1.5 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Toxic to aquatic organisms.
	LC50: 0.1 mg/l Exposure time: 96 h Species: Mysidopsis bahia (mysid shrimp) semi-static test Very toxic to aquatic organisms.
n-hexane	EL50: 21.85 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: QSAR modeled data
1-Hexene	EC50: 4.4 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Test substance: no Method: OECD Test Guideline 202 Information given is based on data obtained from similar substances.
Ethylbenzene	LC50: 2.6 mg/l Exposure time: 96 h Species: Mysidopsis bahia (mysid shrimp)
	EC50: 2.2 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
2-Methylpentane	3.649 mg/l Exposure time: 48 h Species: Daphnia Method: Value calculated using ECOSAR.
Naphthalene	LC50: 2.16 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea)

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Benzene	EC50: 10 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Test substance: yes Method: OECD Test Guideline 202
3-Methylpentane	No data available
Methylcyclopentane	LC50: 4.45 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: QSAR
2-methyl-2-butene	EC50: 3.84 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202
Cyclohexane	EC50: 0.9 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
2,3-Dimethylbutane	LC50: 4.21 mg/l Exposure time: 48 h Species: Daphnia Method: QSAR modeled data No data available
n-Pentane	EL50: 18.5 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
Methylcyclohexane	EC50: 0.326 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) semi-static test
Hydrogen Sulfide	EC50: 0.12 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Analytical monitoring: yes Test substance: yes Method: OECD Test Guideline 202
Isoprene	EC50: 5.77 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea)

Toxicity to algae

Naphtha, Petroleum, Heavy Catalytic Cracked	: ErL50: 3.1 mg/l Exposure time: 96 h Species: Selenastrum capricornutum (green algae) static test Method: OECD Test Guideline 201
---	---

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Hydrocarbons, C3-11, catalytic cracker distillates	1 - 100 mg/l Toxic to algae.
Naphtha (petroleum), light alkylate	EC50: 3.1 mg/l Exposure time: 96 h Species: <i>Selenastrum capricornutum</i> (algae) static test Method: OECD Test Guideline 201
Toluene	EC50: 134 mg/l Exposure time: 72 h Species: <i>Chlamydomonas angulosa</i> (Green algae)
Isopentane	EC50: 7.51 mg/l Exposure time: 72 h Species: <i>Scenedesmus capricornutum</i> (fresh water algae) Growth inhibition Method: OECD Test Guideline 201 Information given is based on data obtained from similar substances. EL50: 25.3 mg/l Exposure time: 72 h Species: <i>Raphidocellus subcapitata</i> (algae) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
2,2,4-Trimethylpentane (Isooctane)	EL50: 2.943 mg/l Exposure time: 72 h Method: QSAR modeled data
C9-C11 Isoalkanes	ErL50: > 1,000 mg/l Exposure time: 72 h Species: <i>Pseudokirchneriella subcapitata</i> (algae) static test Method: OECD Test Guideline 201 Information given is based on data obtained from similar substances.
Isoalkanes C7-8	EL50: 29.0 mg/l Exposure time: 72 h Species: <i>Pseudokirchneriella subcapitata</i> (green algae) Growth inhibition Method: OECD Test Guideline 201
Cyclopentane	EC50: 2.04 mg/l Exposure time: 72 h Species: <i>Scenedesmus capricornutum</i> (fresh water algae) static test Method: OECD Test Guideline 201 Information given is based on data obtained from similar substances.
n-Heptane	EL50: 4.338 mg/l Exposure time: 72 h Species: <i>Pseudokirchneriella subcapitata</i> (microalgae) Method: QSAR
n-hexane	EL50: 9.29 mg/l Exposure time: 72 h Species: <i>Pseudokirchneriella subcapitata</i> (green algae) Method: QSAR modeled data

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

1-Hexene	NOEC: 1.8 mg/l Exposure time: 96 h Species: Pseudokirchneriella subcapitata (green algae) Growth inhibition Method: OECD Test Guideline 201 Information given is based on data obtained from similar substances. EC50: > 5.5 mg/l Exposure time: 96 h Species: Pseudokirchneriella subcapitata (green algae) Growth inhibition Method: OECD Test Guideline 201 Information given is based on data obtained from similar substances.
Ethylbenzene	ErC50: 5.0 mg/l Exposure time: 96 h Species: Selenastrum capricornutum (algae) ErC50: 7.7 mg/l Exposure time: 72 h Species: Skeletonema costatum (Marine Algae)
2-Methylpentane	4.321 mg/l Exposure time: 96 h Species: green algae Method: Value calculated using ECOSAR.
Naphthalene	EC50: 2.96 mg/l Exposure time: 48 h Species: Selenastrum capricornutum (algae)
Benzene	ErC50: 100 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae) Test substance: yes Method: OECD Test Guideline 201
Methylcyclopentane	EC50: 5.048 mg/l Exposure time: 96 h Species: green algae Method: QSAR
2-methyl-2-butene	ErC50: 13.2 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae) static test Method: OECD Test Guideline 201
Cyclohexane	EbC50: 3.4 mg/l Exposure time: 72 h Species: Selenastrum capricornutum (algae) NOEC: 0.925 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (microalgae) Method: OECD Test Guideline 201
n-Pentane	EL50: 7.79 mg/l Exposure time: 72 h Species: Raphidocellus subcapitata (algae) Method: QSAR modeled data

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Methylcyclohexane

EC50: 0.134 mg/l
Exposure time: 72 h
Species: Pseudokirchneriella subcapitata (green algae)
static test

Hydrogen Sulfide

EC50: 1.87 mg/l
Exposure time: 24 h
Species: Selenastrum capricornutum (algae)
static test Test substance: yes

Isoprene

EC50: > 35.2 mg/l
Exposure time: 96 h
Species: Pseudokirchneriella subcapitata (green algae)

M-Factor

cyclohexane

: M-Factor (Acute Aquat. Tox.) 1

M-Factor (Chron. Aquat. Tox.) 1

M-Factor

methylcyclohexane

M-Factor (Acute Aquat. Tox.) 1

M-Factor (Chron. Aquat. Tox.) 1

Toxicity to bacteria

Methylcyclohexane

: IC50: 29 mg/l
Exposure time: 15 h
Growth inhibition

Toxicity to fish (Chronic toxicity)

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Hydrocarbons, C3-11, catalytic cracker distillates	: NOEL: 2.6 mg/l Toxic effects on fish and plankton
Isopentane	EL10: 6.57 mg/l Exposure time: 60 d Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
C9-C11 Isoalkanes	NOELR: 0.132 mg/l Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data
Isoalkanes C7-8	EL10: 0.38 mg/l Exposure time: 60 d Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data
n-Heptane	NOELR: 1.284 mg/l Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data
n-Pentane	EL10: 2.03 mg/l Exposure time: 60 d Species: Oncorhynchus mykiss (rainbow trout) Method: QSAR modeled data The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

Naphtha, Petroleum, Heavy Catalytic Cracked	: NOELR: 2.6 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) semi-static test Method: OECD Test Guideline 211
Hydrocarbons, C3-11, catalytic cracker distillates	: NOEL: 2.6 mg/l Species: Daphnia sp. (Water flea) Toxic effects on fish and plankton
Naphtha (petroleum), light alkylate	: NOELR: 2.6 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) semi-static test Method: OECD Test Guideline 211
Isopentane	: EL10: 11.5 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
2,2,4-Trimethylpentane	: NOEL: 0.17 mg/l

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

(Isooctane)	Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 Information given is based on data obtained from similar substances.
Isoalkanes C7-8	: NOELR: 1 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211 Information given is based on data obtained from similar substances.
Ethylbenzene	: NOEC: 1 mg/l Exposure time: 7 d Species: Daphnia pulex (Water flea) semi-static test Analytical monitoring: yes
n-Pentane	: EL10: 3.54 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) The value is given based on a SAR/AAR approach using OECD Toolbox, DEREK, VEGA QSAR models (CAESAR models), etc.
Hydrogen Sulfide	: Not classified due to data which are conclusive although insufficient for classification.
Biodegradability	
Naphtha, Petroleum, Heavy Catalytic Cracked	: aerobic Result: Inherently biodegradable. 96 % Testing period: 56 d Method: ISO/DIS 14593
Naphtha (petroleum), light catalytic reformed	: aerobic 96.17 % Method: ISO/DIS 14593 Expected to be inherently biodegradable.
Hydrocarbons, C3-11, catalytic cracker distillates	: 96.17 % Testing period: 28 d Expected to be inherently biodegradable.
Naphtha (petroleum), light alkylate	: This material is not expected to be readily biodegradable. Expected to be inherently biodegradable.
Toluene	: This material is expected to be readily biodegradable.
Isopentane	: aerobic Result: Readily biodegradable. 71.43 % Testing period: 28 d Method: OECD Test Guideline 301F
2,2,4-Trimethylpentane (Isooctane)	: Result: Not readily biodegradable. Method: OECD Test Guideline 301

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Expected to be inherently biodegradable. Information given is based on data obtained from similar substances.
Xylenes	: This material is expected to be readily biodegradable.
C9-C11 Isoalkanes	: aerobic 53 % Testing period: 28 d Method: OECD Test Guideline 301F This material is not expected to be readily biodegradable. Expected to be inherently biodegradable. Information given is based on data obtained from similar substances.
Isoalkanes C7-8	: Result: Not readily biodegradable. 60 % Testing period: 60 d Method: OECD Test Guideline 301F Expected to be inherently biodegradable. Information given is based on data obtained from similar substances.
Cyclopentane	: aerobic Result: Not readily biodegradable. 0 % Testing period: 28 d Method: OECD Test Guideline 301F Expected to be inherently biodegradable.
n-Heptane	: Result: Readily biodegradable. 70 % Testing period: 10 d
n-Butane	: This material is expected to be readily biodegradable.
n-hexane	: This material is expected to be readily biodegradable.
1-Hexene	: 67 - 98 % Testing period: 28 d Test substance: yes According to the results of tests of biodegradability this product is considered as being readily biodegradable.
Ethylbenzene	: This material is expected to be readily biodegradable.
2,2-Dimethylbutane	: This material is volatile and is expected to partition to air. Expected to be inherently biodegradable.
2-Methylpentane	: Expected to be biodegradable Information given is based on data obtained from similar substances.
Benzene	: According to the results of tests of biodegradability this product is considered as being readily biodegradable.
Methylcyclopentane	: aerobic Result: Readily biodegradable. 93 - 94 % Testing period: 28 d

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Method: OECD Test Guideline 301C Information given is based on data obtained from similar substances.
2-methyl-2-butene	: aerobic 7 % Testing period: 28 d Method: OECD Test Guideline 301D This material is not expected to be readily biodegradable.
Cyclohexane	: 77 % Testing period: 28 d Method: OECD Test Guideline 301 This material is expected to be readily biodegradable.
n-Pentane	: Result: Readily biodegradable. 87 % Method: OECD Test Guideline 301F
Methylcyclohexane	: aerobic 0 % Testing period: 28 d Method: OECD Test Guideline 301D
Hydrogen Sulfide	: The methods for determining biodegradability are not applicable to inorganic substances. This material is expected to be readily biodegradable.
Isoprene	: Expected to be biodegradable
Physico-chemical removability	
Hydrogen Sulfide	: The product can be degraded by abiotic (e.g. chemical or photolytic) processes. Readily eliminated from water
Bioaccumulation	
Naphtha, Petroleum, Heavy Catalytic Cracked	: The product may be accumulated in organisms.
Naphtha (petroleum), light catalytic reformed	: The product may be accumulated in organisms.
Hydrocarbons, C3-11, catalytic cracker distillates	: No data available
Naphtha (petroleum), light alkylate	: The product may be accumulated in organisms.
Toluene	: This material is not expected to bioaccumulate.
Isopentane	: Accumulation in aquatic organisms is unlikely.
2,2,4-Trimethylpentane (Isooctane)	: Bioconcentration factor (BCF): 231 Method: QSAR modeled data This material is not expected to bioaccumulate.
Xylenes	: This material is not expected to bioaccumulate.
C9-C11 Isoalkanes	: This material is not expected to bioaccumulate. Information given is based on data obtained from similar

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

substances.

Isoalkanes C7-8 : This material is not expected to bioaccumulate.

Cyclopentane : Accumulation in aquatic organisms is unlikely.

n-Heptane : Bioconcentration factor (BCF): 552
 Method: QSAR modeled data
 This material is not expected to bioaccumulate.

n-Butane : This material is not expected to bioaccumulate.

n-hexane : Bioconcentration factor (BCF): 501
 Does not significantly accumulate in organisms.

1-Hexene : This material is not expected to bioaccumulate.

Ethylbenzene : Bioconcentration factor (BCF): 110

2,2-Dimethylbutane : Accumulation in aquatic organisms is unlikely.

2-Methylpentane : Does not significantly accumulate in organisms.

Benzene : Bioconcentration factor (BCF): 13

Methylcyclopentane : This material is not expected to bioaccumulate.

Cyclohexane : Bioconcentration factor (BCF): 167
 This material is not expected to bioaccumulate.

n-Pentane : Bioconcentration factor (BCF): 171
 Method: QSAR modeled data
 This material is not expected to bioaccumulate.

Methylcyclohexane : No data available

Hydrogen Sulfide : This material is not expected to bioaccumulate.

Mobility

Naphtha, Petroleum, Heavy : No data available

Catalytic Cracked : No data available

Naphtha (petroleum), light : No data available

catalytic reformed

Naphtha (petroleum), light : This product may float or sink in water.
 alkylate After release, disperses into the air.

Toluene : Not expected to adsorb on soil.

Isopentane : No data available

2,2,4-Trimethylpentane : Medium: Air
 (Isooctane) Method: Calculation, Mackay Level I Fugacity Model
 After release, disperses into the air.

C9-C11 Isoalkanes : The product will be dispersed amongst the various
 environmental compartments (soil/ water/ air).

Isoalkanes C7-8 : Medium: Air

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

	Method: Calculation, Mackay Level III Fugacity Model Content: 100 %
Cyclopentane	: No data available
n-Heptane	: Medium: Air Method: Calculation, Mackay Level I Fugacity Model Content: 100 % After release, disperses into the air.
n-Butane	: The product evaporates readily.
n-hexane	: Method: Calculation, Mackay Level III Fugacity Model The product will be dispersed amongst the various environmental compartments (soil/ water/ air).
1-Hexene	: No data available
Ethylbenzene	: Method: Calculation, Mackay Level I Fugacity Model Disperses rapidly in air.
Benzene	: No data available
Methylcyclopentane	: No data available
Cyclohexane	: Not expected to adsorb on soil.
n-Pentane	: After release, disperses into the air.
Hydrogen Sulfide	: No data available The product evaporates readily.
Results of PBT assessment	
Naphtha, Petroleum, Heavy	: Non-classified PBT substance, Non-classified vPvB substance
Catalytic Cracked	
Toluene	: Non-classified vPvB substance, Non-classified PBT substance
Isopentane	: Non-classified PBT substance, Non-classified vPvB substance
2,2,4-Trimethylpentane	: Non-classified PBT substance, Non-classified vPvB substance
(Isooctane)	
Isoalkanes C7-8	: Non-classified PBT substance, Non-classified vPvB substance
n-Heptane	: Non-classified PBT substance, Non-classified vPvB substance
n-Butane	: Not persistent, bioaccumulative, and toxic (PBT)., Not very persistent and very bioaccumulative (vPvB).
n-hexane	: Non-classified vPvB substance, Non-classified PBT substance
1-Hexene	: Non-classified PBT substance, Non-classified vPvB substance
Ethylbenzene	: Non-classified vPvB substance, Non-classified PBT substance
Benzene	: Not persistent, bioaccumulative, and toxic (PBT)., Not very persistent and very bioaccumulative (vPvB).
Methylcyclopentane	: Non-classified PBT substance, Non-classified vPvB substance

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

2-methyl-2-butene	: Non-classified PBT substance, Non-classified vPvB substance
Cyclohexane	: Non-classified PBT substance, Non-classified vPvB substance
Methylcyclohexane	: Non-classified PBT substance, Non-classified vPvB substance
Additional ecological information	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Very toxic to aquatic life with long lasting effects.

Ecotoxicology Assessment

Short-term (acute) aquatic hazard

Naphtha, Petroleum, Heavy Catalytic Cracked	: Toxic to aquatic life.
Naphtha (petroleum), light catalytic reformed	: Toxic to aquatic life.
Hydrocarbons, C3-11, catalytic cracker distillates	: Toxic to aquatic life.
Naphtha (petroleum), light alkylate	: Toxic to aquatic life.
Toluene	: Toxic to aquatic life.
Isopentane	: Toxic to aquatic life.
3,3-Dimethylpentane	: Very toxic to aquatic life.
2,2,4-Trimethylpentane (Isooctane)	: Very toxic to aquatic life.
Xylenes	: Toxic to aquatic life.
C9-C11 Isoalkanes	: Toxic to aquatic life.
Isoalkanes C7-8	: Toxic to aquatic life.
Heptane, branched, cyclic and linear	: Very toxic to aquatic life.
Cyclopentane	: Harmful to aquatic life.
n-Heptane	: Very toxic to aquatic life.
n-hexane	: Toxic to aquatic life.
1-Hexene	: Toxic to aquatic life.
Ethylbenzene	: Toxic to aquatic life.
1,2,4-Trimethylbenzene	: Toxic to aquatic life.
2,2-Dimethylbutane	: Toxic to aquatic life.
2-Methylpentane	: Toxic to aquatic life.
Naphthalene	: Very toxic to aquatic life.
Benzene	: Toxic to aquatic life.
3-Methylpentane	: Toxic to aquatic life.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

2-Methylhexane	: Very toxic to aquatic life.
Methylcyclopentane	: Toxic to aquatic life.
3-Methylhexane	: Very toxic to aquatic life.
2-methyl-2-butene	: Toxic to aquatic life.
Cyclohexane	: Very toxic to aquatic life.
2,3-Dimethylbutane	: Toxic to aquatic life.
2,3-Dimethylpentane	: Very toxic to aquatic life.
2,4-Dimethylpentane	: Very toxic to aquatic life.
n-Pentane	: Toxic to aquatic life.
Methylcyclohexane	: Very toxic to aquatic life.
2,3,4-Trimethylpentane	: Very toxic to aquatic life.
Hydrogen Sulfide	: Very toxic to aquatic life.
Isoprene	: Toxic to aquatic life.
Long-term (chronic) aquatic hazard	
Naphtha, Petroleum, Heavy Catalytic Cracked	: Toxic to aquatic life with long lasting effects.
Naphtha (petroleum), light catalytic reformed	: Toxic to aquatic life with long lasting effects.
Hydrocarbons, C3-11, catalytic cracker distillates	: Toxic to aquatic life with long lasting effects.
Naphtha (petroleum), light alkylate	: Toxic to aquatic life with long lasting effects.
Toluene	: Harmful to aquatic life with long lasting effects.
Isopentane	: This material is not expected to be harmful to aquatic organisms.
3,3-Dimethylpentane	: Very toxic to aquatic life with long lasting effects.
2,2,4-Trimethylpentane (Isooctane)	: Very toxic to aquatic life with long lasting effects.
Xylenes	: Harmful to aquatic life with long lasting effects.
C9-C11 Isoalkanes	: Toxic to aquatic life with long lasting effects.
Isoalkanes C7-8	: Toxic to aquatic life with long lasting effects.
Heptane, branched, cyclic and linear	: Very toxic to aquatic life with long lasting effects.
Cyclopentane	: Harmful to aquatic life with long lasting effects.
n-Heptane	: Very toxic to aquatic life with long lasting effects.
n-hexane	: Toxic to aquatic life with long lasting effects.

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

1-Hexene	: No data available
Ethylbenzene	: Harmful to aquatic life with long lasting effects.
1,2,4-Trimethylbenzene	: Toxic to aquatic life with long lasting effects.
2,2-Dimethylbutane	: Toxic to aquatic life with long lasting effects.
2-Methylpentane	: Toxic to aquatic life with long lasting effects.
Naphthalene	: Very toxic to aquatic life with long lasting effects.
Benzene	: Harmful to aquatic life with long lasting effects.
3-Methylpentane	: Toxic to aquatic life with long lasting effects.
2-Methylhexane	: Very toxic to aquatic life with long lasting effects.
Methylcyclopentane	: No data available
3-Methylhexane	: Very toxic to aquatic life with long lasting effects.
2-methyl-2-butene	: Toxic to aquatic life with long lasting effects.
Cyclohexane	: Very toxic to aquatic life with long lasting effects.
2,3-Dimethylbutane	: Toxic to aquatic life with long lasting effects.
2,3-Dimethylpentane	: Very toxic to aquatic life with long lasting effects.
2,4-Dimethylpentane	: Very toxic to aquatic life with long lasting effects.
n-Pentane	: Toxic to aquatic life with long lasting effects.
Methylcyclohexane	: Very toxic to aquatic life with long lasting effects.
2,3,4-Trimethylpentane	: Very toxic to aquatic life with long lasting effects.
Hydrogen Sulfide	: Not applicable
Isoprene	: Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
---------	--

Contaminated packaging	: Empty remaining contents. Dispose of as unused product.
------------------------	---

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN1203, GASOLINE, 3, II, MARINE POLLUTANT, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), N-HEPTANE)

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1203, GASOLINE, 3, II, (-37 °C c.c.), MARINE POLLUTANT, (NAPHTHA, PETROLEUM, HEAVY CATALYTIC CRACKED)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1203, GASOLINE, 3, II

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN1203, GASOLINE, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (NAPHTHA, PETROLEUM, HEAVY CATALYTIC CRACKED)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

33, UN1203, GASOLINE, 3, II, ENVIRONMENTALLY HAZARDOUS, (NAPHTHA, PETROLEUM, HEAVY CATALYTIC CRACKED)

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

UN1203, GASOLINE, 3, II, ENVIRONMENTALLY HAZARDOUS, (NAPHTHA, PETROLEUM, HEAVY CATALYTIC CRACKED)

Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information**National legislation**

SARA 311/312 Hazards : Flammable (gases, aerosols, liquids, or solids)
Germ cell mutagenicity

SDS Number:100000013939

58/63

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Carcinogenicity
 Reproductive toxicity
 Specific target organ toxicity (single or repeated exposure)
 Aspiration hazard
 Skin corrosion or irritation

CERCLA Reportable Quantity : 200 lbs

Benzene

SARA 302 Reportable Quantity : Listed substances in the product are at low enough levels to not be expected to exceed the RQ

Hydrogen Sulfide

SARA 302 Threshold Planning Quantity : This material does not contain any components with a section 302 EHS TPQ.

SARA 304 Reportable Quantity : Listed substances in the product are at low enough levels to not be expected to exceed the RQ

Hydrogen Sulfide 7783-06-4 100 lbs

SARA 313 Components : The following components are subject to reporting levels established by SARA Title III, Section 313:

: Toluene - 108-88-3
 Xylenes - 1330-20-7
 n-hexane - 110-54-3
 1,2,4-Trimethylbenzene - 95-63-6
 Ethylbenzene - 100-41-4
 Benzene - 71-43-2
 Naphthalene - 91-20-3
 Cyclohexane - 110-82-7
 Isoprene - 78-79-5

Clean Air Act

Ozone-Depletion Potential : This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

: Toluene - 108-88-3
 2,2,4-Trimethylpentane (Isooctane) - 540-84-1
 Xylenes - 1330-20-7
 n-hexane - 110-54-3
 Ethylbenzene - 100-41-4
 Naphthalene - 91-20-3
 Benzene - 71-43-2

The following chemical(s) are listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F):

: Isopentane - 78-78-4

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

n-Butane - 106-97-8
 n-Pentane - 109-66-0
 2-methyl-1-butene - 563-46-2

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489):

: Toluene - 108-88-3
 Isopentane - 78-78-4
 Xylenes - 1330-20-7
 Ethylbenzene - 100-41-4
 Benzene - 71-43-2
 Cyclohexane - 110-82-7
 n-Pentane - 109-66-0
 Methylcyclohexane - 108-87-2

US State Regulations**Pennsylvania Right To Know**

: Naphtha, Petroleum, Heavy Catalytic Cracked - 64741-54-4
 Naphtha (petroleum), light catalytic reformed - 64741-63-5
 Hydrocarbons, C3-11, catalytic cracker distillates - 68476-46-0
 Naphtha (petroleum), light alkylate - 64741-66-8
 Toluene - 108-88-3
 Isopentane - 78-78-4
 3,3-Dimethylpentane - 562-49-2
 2,2,4-Trimethylpentane (Isooctane) - 540-84-1
 Xylenes - 1330-20-7
 C9-C11 Isoalkanes - 68551-16-6
 Isoalkanes C7-8 - 70024-92-9
 Heptane, branched, cyclic and linear - 426260-76-6
 n-Heptane - 142-82-5
 Cyclopentane - 287-92-3
 n-Butane - 106-97-8
 n-hexane - 110-54-3
 1-Hexene - 592-41-6
 Ethylbenzene - 100-41-4
 1,2,4-Trimethylbenzene - 95-63-6
 2,2-Dimethylbutane - 75-83-2
 2-Methylpentane - 107-83-5
 Naphthalene - 91-20-3
 Benzene - 71-43-2
 3-Methylpentane - 96-14-0
 Related Materials -
 2-Methylhexane - 591-76-4
 Methylcyclopentane - 96-37-7
 3-Methylhexane - 589-34-4
 2-methyl-2-butene - 513-35-9
 Cyclohexane - 110-82-7
 2,3-Dimethylbutane - 79-29-8
 2,3-Dimethylpentane - 565-59-3
 2,4-Dimethylpentane - 108-08-7
 n-Pentane - 109-66-0
 Methylcyclohexane - 108-87-2

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

2-methyl-1-butene - 563-46-2
 2-Methyl-2-Pentene - 625-27-4
 Hydrogen Sulfide - 7783-06-4
 Isoprene - 78-79-5
 Cumene - 98-82-8

California Prop. 65
 Components

: WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov/food.

Ethylbenzene	100-41-4
Benzene	71-43-2
Naphthalene	91-20-3
Isoprene	78-79-5
Cumene	98-82-8

WARNING: This product can expose you to chemicals including [listed below], which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

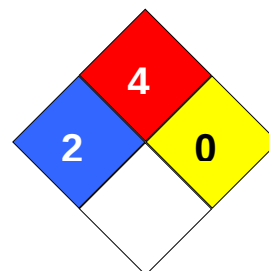
Toluene	108-88-3
n-hexane	110-54-3
Benzene	71-43-2

Notification status

Europe EU REACH	: Not in compliance with the inventory
Switzerland CH INV	: Not in compliance with the inventory
United States of America (USA) TSCA	: On or in compliance with the active portion of the TSCA inventory
Canada NDSL	: This product contains one or several components listed in the Canadian NDSL.
Australia AU AIC	: Not in compliance with the inventory
New Zealand NZIoC	: Not in compliance with the inventory
Japan ENCS	: Not in compliance with the inventory
Japan ISHL	: On the inventory, or in compliance with the inventory
Korea KECI	: Not in compliance with the inventory
Philippines PICCS	: Not in compliance with the inventory
China IECSC	: Not in compliance with the inventory
Taiwan TW TCSI	: Not in compliance with the inventory
Other TECI	: Not in compliance with the inventory

SECTION 16: Other information

NFPA Classification : Health Hazard: 2
 Fire Hazard: 4
 Reactivity Hazard: 0



UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

Revision Date : 2026-08-19
 Date of last issue : 2021-06-14

Print Date : 2026-08-28

Further information

Legacy SDS Number : 34840

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act
KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System

UTG 96 (unleaded test gasoline)

Version 5.2

Revision Date 2026-08-19

LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate
------	--------------------------	-----	-------------------------