

**Gasoline 100 ULE**

Version 2.1

Revision Date 2016-02-04

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

Product Name : Gasoline 100 ULE
Material : 1115453, 1113406, 1108537, 1108536, 1108535, 1062622,
1062256, 1062507, 1062508, 1062509

Company : Chevron Phillips Chemical Company LP
Specialty Chemicals
10001 Six Pines Drive
The Woodlands, TX 77380

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: +800 CHEMCALL (+800 2436 2255) China: +86-21-22157316

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

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

Responsible Department : 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.

Emergency Overview**Danger**

Form: Liquid **Physical state:** Liquid **Color:** Various **Odor:** Strong gasoline

OSHA Hazards : Flammable Liquid, Moderate skin irritant, Moderate eye irritant, Reproductive hazard, Aspiration hazard, Specific target organ systemic toxicity - single exposure, Specific target organ systemic toxicity - repeated exposure

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Classification

: Flammable liquids , Category 2
 Skin irritation , Category 2
 Eye irritation , Category 2A
 Reproductive toxicity , Category 2
 Specific target organ systemic toxicity - single exposure ,
 Category 3 , Central nervous system
 Specific target organ systemic toxicity - repeated exposure ,
 Category 2 , Auditory organs
 Aspiration hazard , Category 1

Labeling

Symbol(s)



Signal Word

: Danger

Hazard Statements

: H225: Highly flammable liquid and vapor.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H319: Causes serious eye irritation.
 H336: May cause drowsiness or dizziness.
 H361: Suspected of damaging fertility or the unborn child.
 H373: May cause damage to organs (Auditory organs) through prolonged or repeated exposure.

Precautionary Statements

: **Prevention:**
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
 P233 Keep container tightly closed.
 P240 Ground/bond container and receiving equipment.
 P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
 P242 Use only non-sparking tools.
 P243 Take precautionary measures against static discharge.
 P260 Do not breathe dust/fume/gas/mist/vapor/spray.
 P264 Wash skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P280 Wear protective gloves/ eye protection/ face protection.
 P281 Use personal protective equipment as required.
Response:
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
 P304 + P340 + P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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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.
 P337 + P313 If eye irritation persists: Get medical advice/attention.
 P362 Take off contaminated clothing and wash before reuse.
 P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
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:**IARC**

No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

ACGIH

Confirmed animal carcinogen with unknown relevance to humans
 Ethanol 64-17-5

SECTION 3: Composition/information on ingredients

Synonyms : Motor Fuel

Molecular formula : Mixture

Component	CAS-No.	Weight %
2,2,4-Trimethylpentane (Isooctane)	540-84-1	30 - 80
Isopentane	78-78-4	5 - 30
Toluene	108-88-3	10 - 30
Ethanol	64-17-5	10 - 30
Isoalkanes 7-8	70024-92-9	1 - 10

SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.

If inhaled : If symptoms persist, call a physician.

In case of skin contact : If skin irritation persists, call a physician. If on skin, rinse well

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- with water. If on clothes, remove clothes.
- In case of eye contact : Immediately flush eye(s) with plenty of water. 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. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.

SECTION 5: Firefighting measures

- Flash point : < -37 °C (< -35 °F)
- Autoignition temperature : No data available
- Suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical.
- 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 an open flame or any other 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 Dioxide. 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

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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.

Advice on protection against fire and explosion : Do not spray on an open flame or any other 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.

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

Ingredients	Basis	Value	Control parameters	Note
Isoalkanes 7-8	Manufacturer	TWA	300 ppm,	

US

Ingredients	Basis	Value	Control parameters	Note
2,2,4-Trimethylpentane (Isooctane)	ACGIH	TWA	300 ppm,	
	ACGIH	TWA	300 ppm,	
Ethanol	OSHA Z-1	TWA	1,000 ppm, 1,900 mg/m3	(b),
	OSHA Z-1-A	TWA	1,000 ppm, 1,900 mg/m3	
	ACGIH	STEL	1,000 ppm,	A3,
Isopentane	ACGIH	TWA	600 ppm,	(),
Toluene	ACGIH	TWA	20 ppm,	BEI, 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	

(i) Adopted values or notations enclosed are those for which changes are proposed in the NIC

(b) The value in mg/m3 is approximate.

A3 Confirmed animal carcinogen with unknown relevance to humans

A4 Not classifiable as a human carcinogen

BEI Substances for which there is a Biological Exposure Index or Indices (see BEI® section)

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Immediately Dangerous to Life or Health Concentrations (IDLH)

Substance name	CAS-No.	Control parameters	Update
Ethanol	64-17-5	Immediately Dangerous to Life or Health Concentration Value 3300 ppm	1995-03-01
Toluene	108-88-3	Immediately Dangerous to Life or Health Concentration Value 500 ppm	1995-03-01

Personal protective equipment

- Respiratory protection : Wear a supplied-air NIOSH approved respirator unless ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as: Air-Purifying Respirator for Organic Vapors. Use a positive pressure, air-supplying respirator if there is potential for uncontrolled release, 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 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. Wear face-shield and protective suit for abnormal processing problems.
- 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 : Various
- Odor : Strong gasoline

Safety data

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Flash point	: < -37 °C (< -35 °F)
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Oxidizing properties	: no
Autoignition temperature	: No data available
Molecular formula	: Mixture
Molecular weight	: Not applicable
pH	: Not applicable
Freezing point	: -94.44 °C (-137.99 °F)
Pour point	No data available
Boiling point/boiling range	: 46 - 116 °C (115 - 241 °F)
Vapor pressure	: 6.70 PSI at 38 °C (100 °F)
Relative density	: 7.45 at 16 °C (61 °F)
Density	: 5.97 L/G
Water solubility	: The ethanol component of this fuel is soluble in water.
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: No data available
Relative vapor density	: 3.2 (Air = 1.0)
Evaporation rate	: > 1
Percent volatile	: > 99 %

SECTION 10: Stability and reactivity

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

Possibility of hazardous reactions

Conditions to avoid : Heat, flames and sparks.

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Materials to avoid	: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.
Hazardous decomposition products	: Carbon Dioxide Carbon oxides
Other data	: No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

Gasoline 100 ULE Acute oral toxicity	: Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method
Gasoline 100 ULE Acute inhalation toxicity	: Acute toxicity estimate: > 20 mg/l Method: Calculation method
Gasoline 100 ULE Acute dermal toxicity	: Acute toxicity estimate: > 2,000 mg/kg Method: Calculation method
Gasoline 100 ULE Skin irritation	: May cause skin irritation in susceptible persons.
Gasoline 100 ULE Eye irritation	: May cause irreversible eye damage.
Gasoline 100 ULE Sensitization	: No adverse effects expected.
Repeated dose toxicity 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.
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

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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

Ethanol

Species: Rat
 Application Route: Oral diet
 Dose: 5%
 Exposure time: 13 wk
 Number of exposures: in drinking water
 NOEL: < 5%
 Lowest observable effect level: 5%
 Target Organs: Liver

Isoalkanes 7-8

Species: Rat
 Application Route: Inhalation
 Dose: 0, 385, 1180 ppm
 Exposure time: 12 wk
 Number of exposures: 6 hr/d, 5 d/wk
 NOEL: > 1180 ppm
 Target Organs: Kidney

Carcinogenicity**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

Ethanol

Species: Mouse
 Sex: male
 Dose: 2.5, 5%
 Exposure time: 2 yrs
 Number of exposures: in drinking water
 Remarks: Increase in liver tumors

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Species: Mouse
 Sex: female
 Dose: 2.5, 5%
 Exposure time: 2 yrs
 Number of exposures: in drinking water
 Remarks: no increase in tumors

Species: Rat
 Dose: 5%
 Exposure time: 30 mo
 Number of exposures: in drinking water
 Remarks: increase number of liver, pituitary, adrenal, and pancreatic tumors

Reproductive toxicity

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.

Isopentane

Species: Rat
 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.

Species: Rat
 Sex: female
 Application Route: oral gavage
 Dose: 0, 100, 300, 1000 mg/kg/d
 Method: OECD Test Guideline 415
 NOAEL Parent: $\geq 1,000$ mg/kg
 NOAEL F1: $\geq 1,000$ mg/kg

Species: Rat
 Sex: male
 Application Route: oral gavage
 Dose: 0, 100, 300, 1000 mg/kg/d
 Method: OECD Test Guideline 415
 NOAEL Parent: ≥ 300 mg/kg

Toluene

Species: Rat
 Application Route: Inhalation
 Dose: 0, 100, 500, 2000 ppm
 Test period: 95 d

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NOAEL Parent: 2000 ppm

Developmental Toxicity2,2,4-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.

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.

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.

Toluene

Species: Rat
Application Route: Inhalation

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	Dose: 0, 100, 500, 2000 ppm Test period: 95 d NOAEL Teratogenicity: 400-750 ppm
Ethanol	Species: Mouse Application Route: oral gavage Dose: 17, 25, 30 % NOAEL Teratogenicity: 17%
Gasoline 100 ULE Aspiration toxicity	: May be fatal if swallowed and enters airways. Substances known to cause human aspiration toxicity hazards or to be regarded as if they cause human aspiration toxicity hazard.
CMR effects	
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.
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.
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.
Gasoline 100 ULE Further information	: Solvents may degrease the skin.

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

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.
Isopentane	LC50: 4.26 mg/l

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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.

Toluene

LC50: 18 - 36 mg/l
 Exposure time: 96 h
 Species: *Pimephales promelas* (fathead minnow)

Ethanol

LC50: 13,480 mg/l
 Exposure time: 96 h
 Species: *Pimephales promelas* (fathead minnow)

Isoalkanes 7-8

LC50: 5.4 mg/l
 Exposure time: 96 h
 Species: *Oncorhynchus mykiss* (rainbow trout)
 Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates

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.

Isopentane

EC50: 2.3 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)

Ethanol

LC50: 12,340 mg/l
 Exposure time: 48 h
 Species: *Daphnia magna* (Water flea)

Isoalkanes 7-8

EL50: 143 mg/l
 Exposure time: 48 h
 Species: *Daphnia magna* (Water flea)
 static test Method: OECD Test Guideline 202

Toxicity to algae

2,2,4-Trimethylpentane
 (Isooctane)

: EL50: 2.943 mg/l
 Exposure time: 72 h
 Method: QSAR modeled data

Isopentane

EC50: 7.51 mg/l
 Exposure time: 72 h
 Species: *Scenedesmus capricornutum* (fresh water algae)
 Growth inhibition Method: OECD Test Guideline 201
 Information given is based on data obtained from similar substances.

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Toluene	EC50: 134 mg/l Exposure time: 72 h Species: Chlamydomonas angulosa (Green algae)
Ethanol	EC50: 1,000 mg/l Exposure time: 72 h Species: Chlorella vulgaris (Fresh water algae)
Isoalkanes 7-8	EL50: 29.0 mg/l Exposure time: 72 h Species: Raphidocellus subcapitata (algae) Growth inhibition Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

2,2,4-Trimethylpentane (Isooctane)	: NOEC: 0.17 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea)
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Elimination information (persistence and degradability)

Bioaccumulation

Isopentane	: Accumulation in aquatic organisms is unlikely.
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Biodegradability	: Expected to be biodegradable
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Ecotoxicology Assessment

Acute aquatic toxicity 2,2,4-Trimethylpentane (Isooctane)	: Very toxic to aquatic life.
Isopentane	: Toxic to aquatic life.
Toluene	: Toxic to aquatic life.
Isoalkanes 7-8	: Toxic to aquatic life.
Chronic aquatic toxicity 2,2,4-Trimethylpentane (Isooctane)	: Very toxic to aquatic life with long lasting effects.
Isopentane	: Toxic to aquatic life with long lasting effects.
Toluene	: Harmful to aquatic life with long lasting effects.
Isoalkanes 7-8	: Toxic to aquatic life with long lasting effects.

Results of PBT assessment 2,2,4-Trimethylpentane (Isooctane)	: Non-classified PBT substance, Non-classified vPvB substance
Isopentane	: Non-classified PBT substance, Non-classified vPvB substance
Toluene	: Non-classified vPvB substance, Non-classified PBT substance

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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.

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. 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)

UN3475, ETHANOL AND GASOLINE MIXTURE, 3, II, MARINE POLLUTANT, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE))

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN3475, ETHANOL AND GASOLINE MIXTURE, 3, II, (< -37 °C), MARINE POLLUTANT, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), ISOPENTANE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN3475, ETHANOL AND GASOLINE MIXTURE, 3, II

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

UN3475, ETHANOL AND GASOLINE MIXTURE, 3, II, (D/E), ENVIRONMENTALLY HAZARDOUS, (2,2,4-TRIMETHYLPENTANE (ISOOCTANE), ISOPENTANE)

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

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UN3475, ETHANOL AND GASOLINE MIXTURE, 3, II, ENVIRONMENTALLY HAZARDOUS,
(2,2,4-TRIMETHYLPENTANE (ISOOCTANE), ISOPENTANE)

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

UN3475, ETHANOL AND GASOLINE MIXTURE, 3, II, ENVIRONMENTALLY HAZARDOUS,
(2,2,4-TRIMETHYLPENTANE (ISOOCTANE), ISOPENTANE)

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

SECTION 15: Regulatory information**National legislation**

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

CERCLA Reportable : 333 lbs
Quantity
Isopentane

SARA 302 Reportable : This material does not contain any components with a SARA
Quantity 302 RQ.

SARA 302 Threshold : No chemicals in this material are subject to the reporting
Planning Quantity requirements of SARA Title III, Section 302.

SARA 304 Reportable : This material does not contain any components with a section
Quantity 304 EHS RQ.

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

: Toluene - 108-88-3

Clean Air Act

Ozone-Depletion : This product neither contains, nor was manufactured with a Class I or
Potential 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 12 (40 CFR 61):
: 2,2,4-Trimethylpentane (Isooctane) - 540-84-1

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Toluene - 108-88-3

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

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

: Ethanol - 64-17-5
Isopentane - 78-78-4
Toluene - 108-88-3

US State Regulations

Pennsylvania Right To Know

: 2,2,4-Trimethylpentane (Isooctane) - 540-84-1
Ethanol - 64-17-5
Isopentane - 78-78-4
Toluene - 108-88-3

New Jersey Right To Know

: 2,2,4-Trimethylpentane (Isooctane) - 540-84-1
Ethanol - 64-17-5
Isopentane - 78-78-4
Toluene - 108-88-3

California Prop. 65
Ingredients

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

Notification status

Europe REACH	: On the inventory, or in compliance with the inventory
United States of America TSCA	: On TSCA Inventory
Canada NDSL	: On the inventory, or in compliance with the inventory
Australia AICS	: On the inventory, or in compliance with the inventory
New Zealand NZIoC	: Not in compliance with the inventory
Japan ENCS	: On the inventory, or in compliance with the inventory
Korea KECI	: On the inventory, or in compliance with the inventory
Philippines PICCS	: Not in compliance with the inventory
China IECSC	: Not in compliance with the inventory

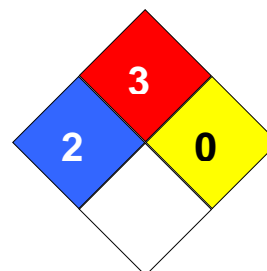
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SECTION 16: Other information

NFPA Classification : Health Hazard: 2
Fire Hazard: 3
Reactivity Hazard: 0

**Further information**

Legacy SDS Number : CPC00143

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%
AICS	Australia, Inventory of Chemical Substances	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	TWA	Time Weighted Average

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	Substances in China		
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
LC50	Lethal Concentration 50%		