



Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

EU/CLP GHS

Synonyms: Hess Conventional (Oxygenated and Non-oxygenated) Gasoline; Reformulated Gasoline (RFG); Reformulated Gasoline Blendstock for Oxygenate Blending (RBOB); Unleaded Motor or Automotive Gasoline

*** Section 1 - Product and Company Identification ***

Manufacturer Information

Hess Corporation
1 Hess Plaza
Woodbridge, NJ 07095-0961

Phone: 732-750-6000 Corporate EHS
Emergency # 800-424-9300 CHEMTREC
www.hess.com (Environment, Health, Safety Internet Website)

*** Section 2 - Hazards Identification ***

GHS Classification:

Flammable Liquid - Category 2
Skin Corrosion/Irritation - Category 2
Germ Cell Mutagenicity - Category 1B
Carcinogenicity - Category 1B
Toxic to Reproduction - Category 1A
Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)
Specific Target Organ Toxicity (Repeat Exposure) - Category 1 (liver, kidneys, bladder, blood, bone marrow, nervous system)
Aspiration Hazard - Category 1
Hazardous to the Aquatic Environment – Acute Hazard - Category 3

GHS LABEL ELEMENTS

Symbol(s)



Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapour.
Causes skin irritation.
May cause genetic defects.
May cause cancer.
May damage fertility or the unborn child.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Causes damage to organs (liver, kidneys, bladder, blood, bone marrow, nervous system) through prolonged or repeated exposure.
May be fatal if swallowed and enters airways.
Harmful to aquatic life.

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Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. No smoking
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
Wash hands and forearms thoroughly after handling.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe mist/vapours/spray.
Use only outdoors or in well-ventilated area.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.

Response

In case of fire: Use water spray, fog, dry chemical fire extinguishers or hand held fire extinguisher.
IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.
IF exposed or concerned: Get medical advice/attention.
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.
Get medical advice/attention if you feel unwell.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.

Storage

Store in a well-ventilated place.
Keep cool. Keep container tightly closed.
Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
86290-81-5	Gasoline, motor fuel	100
108-88-3	Toluene	1-25
106-97-8	Butane	<10
1330-20-7	Xylenes (o-, m-, p- isomers)	1-15
95-63-6	Benzene, 1,2,4-trimethyl-	<6
64-17-5	Ethyl alcohol	0-10
100-41-4	Ethylbenzene	<3
71-43-2	Benzene	0.1-4.9

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110-54-3	Hexane	0.5-4
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A complex blend of petroleum-derived normal and branched-chain alkane, cycloalkane, alkene, and aromatic hydrocarbons. May contain antioxidant and multifunctional additives. Non-oxygenated Conventional Gasoline and RBOB do not have oxygenates (Ethanol or MTBE and/or TAME). Oxygenated Conventional and Reformulated Gasoline will have oxygenates for octane enhancement or as legally required.

*** Section 4 - First Aid Measures ***

First Aid: Eyes

In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention.

First Aid: Skin

Remove contaminated clothing. Wash contaminated areas thoroughly with soap and water or with waterless hand cleanser. Obtain medical attention if irritation or redness develops.

First Aid: Ingestion

DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Monitor for breathing difficulties. Small amounts of material which enter the mouth should be rinsed out until the taste is dissipated.

First Aid: Inhalation

Remove person to fresh air. If person is not breathing, provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

Vapors may be ignited rapidly when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitroresols that can decompose violently.

Extinguishing Media

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray, fire fighting foam, or gaseous extinguishing agent.

LARGE FIRES: Water spray, fog or fire fighting foam. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Firefighting foam suitable for polar solvents is recommended for fuel with greater than 10% oxygenate concentration.

Unsuitable Extinguishing Media

None

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Fire Fighting Equipment/Instructions

Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other fire fighting equipment. Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH/MSHA- approved pressure-demand self-contained breathing apparatus with full facepiece and full protective clothing. Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water. For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied fire fighting foam.

* * * Section 6 - Accidental Release Measures * * *

Recovery and Neutralization

Carefully contain and stop the source of the spill, if safe to do so.

Materials and Methods for Clean-Up

Take up with sand or other oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container for reclamation or disposal. Caution, flammable vapors may accumulate in closed containers.

Emergency Measures

Evacuate nonessential personnel and remove or secure all ignition sources. Consider wind direction; stay upwind and uphill, if possible. Evaluate the direction of product travel, diking, sewers, etc. to confirm spill areas. Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Personal Precautions and Protective Equipment

Response and clean-up crews must be properly trained and must utilize proper protective equipment (see Section 8).

Environmental Precautions

Protect bodies of water by diking, absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of fire fighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Prevention of Secondary Hazards

None

* * * Section 7 - Handling and Storage * * *

Handling Procedures

USE ONLY AS A MOTOR FUEL.
DO NOT SIPHON BY MOUTH

Handle as a flammable liquid. Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.

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Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage Procedures

Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers. Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code". Avoid storage near incompatible materials. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks In Flammable and Combustible Liquid Service" and API RP 2015 "Cleaning Petroleum Storage Tanks".

Incompatibilities

Keep away from strong oxidizers.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Component Exposure Limits

Gasoline, motor fuel (289-220-8)

ACGIH: 500 ppm STEL

300 ppm TWA

Netherlands: 480 mg/m³ STEL

240 mg/m³ TWA

Portugal: 300 ppm TWA [VLE-MP]

Spain: 300 ppm TWA [VLA-ED] (manufacturing, commercialization, and use restrictions under REACH)

Toluene (203-625-9)

EU: 50 ppm TWA; 192 mg/m³ TWA

100 ppm STEL; 384 mg/m³ STEL

Possibility of significant uptake through the skin

ACGIH: 20 ppm TWA

Austria: 100 ppm STEL [KZW] (4 X 15 min); 380 mg/m³ STEL [KZW] (4 X 15 min)

50 ppm TWA [TMW]; 190 mg/m³ TWA [TMW]

skin notation

Belgium: 100 ppm STEL; 384 mg/m³ STEL

22 ppm TWA; 77 mg/m³ TWA

Skin

Denmark: 25 ppm TWA; 94 mg/m³ TWA

Potential for cutaneous absorption

Finland: 100 ppm STEL; 380 mg/m³ STEL

25 ppm TWA; 81 mg/m³ TWA

Potential for cutaneous absorption

France: 100 ppm STEL [VLCT] (restrictive limit); 384 mg/m³ STEL [VLCT] (restrictive limit)

50 ppm TWA [VME] (restrictive limit); 192 mg/m³ TWA [VME] (restrictive limit)

Germany: 50 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 4); 190 mg/m³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 4)

1.0 mg/L Medium: whole blood Time: end of shift Parameter: Toluene; 3.0 mg/L Medium: urine Time: end of several shifts Parameter: o-Cresol (for long-term exposures)

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50 ppm TWA MAK; 190 mg/m³ TWA MAK
200 ppm Peak; 760 mg/m³ Peak
Greece: 100 ppm STEL; 384 mg/m³ STEL
50 ppm TWA; 192 mg/m³ TWA
Ireland: 100 ppm STEL; 384 mg/m³ STEL
50 ppm TWA; 192 mg/m³ TWA
Potential for cutaneous absorption
Italy: 192 ppm TWA; 50 mg/m³ TWA
Netherlands: 384 mg/m³ STEL
150 mg/m³ TWA
Portugal: 50 ppm TWA [VLE-MP]
Spain: 100 ppm STEL [VLA-EC]; 384 mg/m³ STEL [VLA-EC]
50 ppm TWA [VLA-ED] (indicative limit value; manufacturing, commercialization, and use restrictions under REACH); 192 mg/m³ TWA [VLA-ED] (indicative limit value; manufacturing, commercialization, and use restrictions under REACH)
skin - potential for cutaneous exposure
Sweden: 50 ppm LLV; 200 mg/m³ LLV
100 ppm STV; 400 mg/m³ STV

Butane (203-448-7)

ACGIH: 1000 ppm TWA (listed under Aliphatic hydrocarbon gases: Alkane C1-4)
Austria: 1600 ppm STEL [KZW] (3 X 60 min); 3800 mg/m³ STEL [KZW] (3 X 60 min)
800 ppm TWA [TMW]; 1900 mg/m³ TWA [TMW]
Belgium: 1000 ppm TWA (as Aliphatic hydrocarbons [alkanes C1-4], gas)
Denmark: 500 ppm TWA; 1200 mg/m³ TWA
Finland: 1000 ppm STEL; 2400 mg/m³ STEL
800 ppm TWA; 1900 mg/m³ TWA
France: 800 ppm TWA [VME]; 1900 mg/m³ TWA [VME]
Germany: 1000 ppm TWA AGW (exposure factor 4); 2400 mg/m³ TWA AGW (exposure factor 4)
1000 ppm TWA MAK; 2400 mg/m³ TWA MAK
4000 ppm Peak (listed under Butane); 9600 mg/m³ Peak (listed under Butane)
Greece: 1000 ppm TWA; 2350 mg/m³ TWA
Ireland: 1000 ppm TWA
Spain: 1000 ppm TWA [VLA-ED]

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Xylenes (o-, m-, p- isomers) (215-535-7)

- ACGIH: 150 ppm STEL
100 ppm TWA
- Austria: 100 ppm STEL [KZW] (4 X 15 min); 442 mg/m³ STEL [KZW] (all isomers, 4 X 15 min)
50 ppm TWA [TMW]; 221 mg/m³ TWA [TMW] (all isomers)
skin notation
- Belgium: 100 ppm STEL; 442 mg/m³ STEL
50 ppm TWA; 221 mg/m³ TWA
Skin
- Denmark: 25 ppm TWA; 109 mg/m³ TWA
Potential for cutaneous absorption (listed under Xylene, all isomers)
- Finland: 100 ppm STEL; 440 mg/m³ STEL
50 ppm TWA; 220 mg/m³ TWA
Potential for cutaneous absorption
- France: 100 ppm STEL [VLCT] (restrictive limit); 442 mg/m³ STEL [VLCT] (restrictive limit)
50 ppm TWA [VME] (restrictive limit); 221 mg/m³ TWA [VME] (restrictive limit)
- Germany: 100 ppm TWA AGW (all isomers, exposure factor 2); 440 mg/m³ TWA AGW (all isomers,
exposure factor 2)
1.5 mg/L Medium: whole blood Time: end of shift Parameter: Xylene (all isomers); 2 g/L Medium:
urine Time: end of shift Parameter: Xylene (all isomers)
100 ppm TWA MAK; 440 mg/m³ TWA MAK
200 ppm Peak (all isomers); 880 mg/m³ Peak (all isomers)
- Greece: 150 ppm STEL; 650 mg/m³ STEL
100 ppm TWA; 435 mg/m³ TWA
- Ireland: 100 ppm STEL; 442 mg/m³ STEL
50 ppm TWA; 221 mg/m³ TWA
Potential for cutaneous absorption
- Italy: 50 ppm TWA (pure); 221 mg/m³ TWA (pure)
- Netherlands: 442 mg/m³ STEL
210 mg/m³ TWA
skin notation
- Portugal: 100 ppm TWA [VLE-MP]
- Spain: 100 ppm STEL [VLA-EC]; 442 mg/m³ STEL [VLA-EC]
50 ppm TWA [VLA-ED] (indicative limit value); 221 mg/m³ TWA [VLA-ED] (indicative limit value)
skin - potential for cutaneous exposure
- Sweden: 50 ppm LLV; 200 mg/m³ LLV
100 ppm STV; 450 mg/m³ STV

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Benzene, 1,2,4-trimethyl- (202-436-9)

- Austria: 30 ppm STEL [KZW] (4 X 15 min); 150 mg/m³ STEL [KZW] (4 X 15 min)
20 ppm TWA [TMW]; 100 mg/m³ TWA [TMW]
- Denmark: 20 ppm TWA; 100 mg/m³ TWA
- Finland: 20 ppm TWA; 100 mg/m³ TWA
- France: 50 ppm STEL [VLCT] (restrictive limit); 250 mg/m³ STEL [VLCT] (restrictive limit)
20 ppm TWA [VME] (restrictive limit); 100 mg/m³ TWA [VME] (restrictive limit)
- Germany: 20 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 2); 100 mg/m³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 2)
20 ppm TWA MAK; 100 mg/m³ TWA MAK
40 ppm Peak (all isomers, listed under Trimethylbenzene); 200 mg/m³ Peak (all isomers, listed under Trimethylbenzene)
- Greece: 25 ppm TWA; 125 mg/m³ TWA
- Ireland: 20 ppm TWA; 100 mg/m³ TWA
- Italy: 20 ppm TWA; 100 mg/m³ TWA
- Netherlands: 200 mg/m³ STEL
100 mg/m³ TWA
- Spain: 20 ppm TWA [VLA-ED] (indicative limit value); 100 mg/m³ TWA [VLA-ED] (indicative limit value)
- Sweden: 25 ppm LLV; 120 mg/m³ LLV
35 ppm STV; 170 mg/m³ STV

Ethyl alcohol (200-578-6)

- ACGIH: 1000 ppm STEL
- Austria: 2000 ppm STEL [KZW] (3 X 60 min); 3800 mg/m³ STEL [KZW] (3 X 60 min)
1000 ppm TWA [TMW]; 1900 mg/m³ TWA [TMW]
- Belgium: 1000 ppm TWA; 1907 mg/m³ TWA
- Denmark: 1000 ppm TWA; 1900 mg/m³ TWA
- Finland: 1300 ppm STEL; 2500 mg/m³ STEL
1000 ppm TWA; 1900 mg/m³ TWA
- France: 5000 ppm STEL [VLCT]; 9500 mg/m³ STEL [VLCT]
1000 ppm TWA [VME]; 1900 mg/m³ TWA [VME]
- Germany: 500 ppm TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 2); 960 mg/m³ TWA AGW (The risk of damage to the embryo or fetus can be excluded when MAK and BAT values are observed, exposure factor 2)
500 ppm TWA MAK; 960 mg/m³ TWA MAK
1000 ppm Peak; 1920 mg/m³ Peak
- Greece: 1000 ppm TWA; 1900 mg/m³ TWA
- Ireland: 1000 ppm TWA; 1900 mg/m³ TWA
- Netherlands: 1900 mg/m³ STEL
260 mg/m³ TWA
skin notation
- Portugal: 1000 ppm TWA [VLE-MP]
- Spain: 1000 ppm TWA [VLA-ED] (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary o biocide compound); 1910 mg/m³ TWA [VLA-ED] (it is prohibited the partial or complete commercialization or use of this substance as a phytosanitary o biocide compound)
- Sweden: 500 ppm LLV; 1000 mg/m³ LLV
1000 ppm STV; 1900 mg/m³ STV

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Ethylbenzene (202-849-4)

ACGIH: 20 ppm TWA
Austria: 200 ppm STEL [KZW] (8 X 5 min); 880 mg/m3 STEL [KZW] (8 X 5 min)
100 ppm TWA [TMW]; 440 mg/m3 TWA [TMW]
skin notation
Belgium: 125 ppm STEL; 551 mg/m3 STEL
100 ppm TWA; 442 mg/m3 TWA
Skin
Denmark: 50 ppm TWA; 217 mg/m3 TWA
Finland: 200 ppm STEL; 880 mg/m3 STEL
50 ppm TWA; 220 mg/m3 TWA
Potential for cutaneous absorption
France: 100 ppm STEL [VLCT] (restrictive limit); 442 mg/m3 STEL [VLCT] (restrictive limit)
20 ppm TWA [VME] (restrictive limit); 88.4 mg/m3 TWA [VME] (restrictive limit)
Germany: 100 ppm TWA AGW (exposure factor 2); 440 mg/m3 TWA AGW (exposure factor 2)
1 mg/L Medium: whole blood Time: end of shift Parameter: Ethylbenzene; 800 mg/g Medium:
urine Time: end of shift Parameter: Mandelic acid plus Phenylglyoxylic acid (measured as mg/g
Creatinine)
20 ppm TWA MAK; 88 mg/m3 TWA MAK
40 ppm Peak; 176 mg/m3 Peak
Greece: 125 ppm STEL; 545 mg/m3 STEL
100 ppm TWA; 435 mg/m3 TWA
Ireland: 200 ppm STEL; 884 mg/m3 STEL
100 ppm TWA; 442 mg/m3 TWA
Potential for cutaneous absorption
Italy: 100 ppm TWA; 442 mg/m3 TWA
Netherlands: 430 mg/m3 STEL
215 mg/m3 TWA
skin notation
Portugal: 100 ppm TWA [VLE-MP]
Spain: 200 ppm STEL [VLA-EC]; 884 mg/m3 STEL [VLA-EC]
100 ppm TWA [VLA-ED] (indicative limit value); 441 mg/m3 TWA [VLA-ED] (indicative limit
value)
skin - potential for cutaneous exposure
Sweden: 50 ppm LLV; 200 mg/m3 LLV
100 ppm STV; 450 mg/m3 STV

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Benzene (200-753-7)

- ACGIH: 2.5 ppm STEL
0.5 ppm TWA
Skin - potential significant contribution to overall exposure by the cutaneous route
- Austria: skin notation
- Belgium: 1 ppm TWA; 3.25 mg/m³ TWA
Skin
- Denmark: 0.5 ppm TWA; 1.6 mg/m³ TWA
Potential for cutaneous absorption
- Finland: 1 ppm TWA (dust); 3.25 mg/m³ TWA (dust)
Potential for cutaneous absorption
- France: 1 ppm TWA [VME] (restrictive limit); 3.25 mg/m³ TWA [VME] (restrictive limit)
- Greece: 1.0 ppm TWA; 3.19 mg/m³ TWA
- Ireland: 1 ppm TWA; 3 mg/m³ TWA
Potential for cutaneous absorption
- Italy: 1 ppm TWA; 3.25 mg/m³ TWA
- Netherlands: 3.25 mg/m³ TWA
skin notation
- Portugal: 0.5 ppm TWA [VLE-MP]
- Spain: 1 ppm TWA [VLA-ED] (manufacturing, commercialization, and use restrictions under REACH);
3.25 mg/m³ TWA [VLA-ED] (manufacturing, commercialization, and use restrictions under REACH)
skin - potential for cutaneous exposure
- Sweden: 0.5 ppm LLV; 1.5 mg/m³ LLV
3 ppm STV; 9 mg/m³ STV

Hexane (203-777-6)

- EU: 20 ppm TWA; 72 mg/m³ TWA
- ACGIH: 50 ppm TWA
Skin - potential significant contribution to overall exposure by the cutaneous route
- Austria: 80 ppm STEL [KZW] (4 X 15 min); 288 mg/m³ STEL [KZW] (4 X 15 min)
20 ppm TWA [TMW]; 72 mg/m³ TWA [TMW]
- Belgium: 20 ppm TWA; 72 mg/m³ TWA
- Denmark: 20 ppm TWA; 72 mg/m³ TWA
- Finland: 20 ppm TWA; 72 mg/m³ TWA
Potential for cutaneous absorption
- France: 20 ppm TWA [VME] (restrictive limit); 72 mg/m³ TWA [VME] (restrictive limit)
- Germany: 50 ppm TWA AGW (exposure factor 8); 180 mg/m³ TWA AGW (exposure factor 8)
5 mg/L Medium: urine Time: end of shift Parameter: 2,5-Hexandione plus 4,5-Dihydroxy-2-hexanone
50 ppm TWA MAK; 180 mg/m³ TWA MAK
400 ppm Peak; 1440 mg/m³ Peak
- Greece: 20 ppm TWA; 72 mg/m³ TWA
- Ireland: 20 ppm TWA; 72 mg/m³ TWA
- Italy: 20 ppm TWA; 72 mg/m³ TWA
- Netherlands: 144 mg/m³ STEL
72 mg/m³ TWA
- Portugal: 50 ppm TWA [VLE-MP]
- Spain: 20 ppm TWA [VLA-ED] (indicative limit value); 72 mg/m³ TWA [VLA-ED] (indicative limit value)
- Sweden: 25 ppm LLV; 90 mg/m³ LLV
50 ppm STV; 180 mg/m³ STV

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Engineering Measures

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.

Personal Protective Equipment: Respiratory

A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited.

Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.

Personal Protective Equipment: Hands

Gloves constructed of nitrile, neoprene, or PVC are recommended.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes

Safety glasses or goggles are recommended where there is a possibility of splashing or spraying.

Personal Protective Equipment: Skin and Body

Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for further information.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Translucent, straw-colored or light yellow	Odor:	Strong, characteristic aromatic hydrocarbon odor. Sweet-ether like
Physical State:	Liquid	pH:	ND
Vapor Pressure:	6.4 - 15 RVP @ 100 °F (38 °C) (275-475 mm Hg @ 68 °F (20 °C))	Vapor Density:	AP 3-4
Boiling Point:	85-437 °F (39-200 °C)	Melting Point:	ND
Solubility (H2O):	Negligible to Slight	Specific Gravity:	0.70-0.78
Evaporation Rate:	10-11	VOC:	ND
Percent Volatile:	100%	Octanol/H2O Coeff.:	ND
Flash Point:	-45 °F (-43 °C)	Flash Point Method:	PMCC
Upper Flammability Limit (UFL):	7.6%	Lower Flammability Limit (LFL):	1.4%
Burning Rate:	ND	Auto Ignition:	>530°F (>280°C)

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

This is a stable material.

Hazardous Reaction Potential

Will not occur.

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Conditions to Avoid

Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.

Incompatible Products

Keep away from strong oxidizers.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke). Contact with nitric and sulfuric acids will form nitrocresols that can decompose violently.

* * * Section 11 - Toxicological Information * * *

Acute Toxicity

A: General Product Information

Harmful if swallowed.

B: Component Analysis - LD50/LC50

Gasoline, motor fuel (86290-81-5)

Inhalation LC50 Rat >5.2 mg/L 4 h; Oral LD50 Rat 14000 mg/kg; Dermal LD50 Rabbit >2000 mg/kg

Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

Butane (106-97-8)

Inhalation LC50 Rat 658 mg/L 4 h

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

Inhalation LC50 Rat 5000 ppm 4 h; Inhalation LC50 Rat 47635 mg/L 4 h; Oral LD50 Rat 4300 mg/kg; Dermal LD50 Rabbit >1700 mg/kg

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

Inhalation LC50 Rat 18 g/m³ 4 h; Oral LD50 Rat 3400 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

Ethyl alcohol (64-17-5)

Oral LD50 Rat 7060 mg/kg; Inhalation LC50 Rat 124.7 mg/L 4 h

Ethylbenzene (100-41-4)

Inhalation LC50 Rat 17.2 mg/L 4 h; Oral LD50 Rat 3500 mg/kg; Dermal LD50 Rabbit 15354 mg/kg

Benzene (71-43-2)

Inhalation LC50 Rat 13050-14380 ppm 4 h; Oral LD50 Rat 1800 mg/kg

Hexane (110-54-3)

Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg

Potential Health Effects: Skin Corrosion Property/Stimulativeness

Practically non-toxic if absorbed following acute (single) exposure. May cause skin irritation with prolonged or repeated contact. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are repeatedly exposed.

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SDS No. 9950

Potential Health Effects: Eye Critical Damage/ Stimulativeness

Moderate irritant. Contact with liquid or vapor may cause irritation.

Potential Health Effects: Ingestion

Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

Potential Health Effects: Inhalation

Excessive exposure may cause irritations to the nose, throat, lungs and respiratory tract. Central nervous system (brain) effects may include headache, dizziness, loss of balance and coordination, unconsciousness, coma, respiratory failure, and death.

WARNING: the burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

Respiratory Organs Sensitization/Skin Sensitization

This product is not reported to have any skin sensitization effects.

Generative Cell Mutagenicity

This product may cause genetic defects.

Carcinogenicity

A: General Product Information

May cause cancer.

IARC has determined that gasoline and gasoline exhaust are possibly carcinogenic in humans. Inhalation exposure to completely vaporized unleaded gasoline caused kidney cancers in male rats and liver tumors in female mice. The U.S. EPA has determined that the male kidney tumors are species-specific and are irrelevant for human health risk assessment. The significance of the tumors seen in female mice is not known. Exposure to light hydrocarbons in the same boiling range as this product has been associated in animal studies with effects to the central and peripheral nervous systems, liver, and kidneys. The significance of these animal models to predict similar human response to gasoline is uncertain.

This product contains benzene. Human health studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-forming system (particularly bone marrow), and serious blood disorders such as aplastic anemia and leukemia. Benzene is listed as a human carcinogen by the NTP, IARC, OSHA and ACGIH.

B: Component Carcinogenicity

Gasoline, motor fuel (86290-81-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

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

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

Ethyl alcohol (64-17-5)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 100E [in preparation] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages) (Group 1 (carcinogenic to humans))

Ethylbenzene (100-41-4)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 77 [2000] (Group 2B (possibly carcinogenic to humans))

Benzene (71-43-2)

ACGIH: A1 - Confirmed Human Carcinogen

OSHA: 5 ppm STEL (Cancer hazard, Flammable, See 29 CFR 1910.1028, 15 min); 0.5 ppm Action Level; 1 ppm TWA

NIOSH: potential occupational carcinogen

NTP: Known Human Carcinogen (Select Carcinogen)

IARC: Monograph 100F [in preparation]; Supplement 7 [1987]; Monograph 29 [1982] (Group 1 (carcinogenic to humans))

Reproductive Toxicity

This product is suspected of damaging fertility or the unborn child.

Specified Target Organ General Toxicity: Single Exposure

This product may cause drowsiness or dizziness.

Specified Target Organ General Toxicity: Repeated Exposure

This product causes damage to organs through prolonged or repeated exposure.

Aspiration Respiratory Organs Hazard

The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

Very toxic to aquatic life with long lasting effects. Keep out of sewers, drainage areas and waterways. Report spills and releases, as applicable, under Federal and State regulations.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Gasoline, motor fuel (86290-81-5)

Test & Species	Conditions
96 Hr LC50 Alburnus alburnus	119 mg/L [static]
96 Hr LC50 Cyprinodon variegatus	82 mg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata	56 mg/L
24 Hr EC50 Daphnia magna	170 mg/L

Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

Toluene (108-88-3)

Test & Species

96 Hr LC50 Pimephales promelas	15.22-19.05 mg/L [flow-through]
96 Hr LC50 Pimephales promelas	12.6 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	5.89-7.81 mg/L [flow-through]
96 Hr LC50 Oncorhynchus mykiss	14.1-17.16 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L [semi- static]
96 Hr LC50 Lepomis macrochirus	11.0-15.0 mg/L [static]
96 Hr LC50 Oryzias latipes	54 mg/L [static]
96 Hr LC50 Poecilia reticulata	28.2 mg/L [semi- static]
96 Hr LC50 Poecilia reticulata	50.87-70.34 mg/L [static]
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L [static]
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L [Static]
48 Hr EC50 Daphnia magna	11.5 mg/L

Conditions

1 day old

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

Test & Species

96 Hr LC50 Pimephales promelas	13.4 mg/L [flow- through]
96 Hr LC50 Oncorhynchus mykiss	2.661-4.093 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	13.5-17.3 mg/L
96 Hr LC50 Lepomis macrochirus	13.1-16.5 mg/L [flow-through]
96 Hr LC50 Lepomis macrochirus	19 mg/L
96 Hr LC50 Lepomis macrochirus	7.711-9.591 mg/L [static]
96 Hr LC50 Pimephales promelas	23.53-29.97 mg/L [static]
96 Hr LC50 Cyprinus carpio	780 mg/L [semi- static]
96 Hr LC50 Cyprinus carpio	>780 mg/L
96 Hr LC50 Poecilia reticulata	30.26-40.75 mg/L [static]
48 Hr EC50 water flea	3.82 mg/L
48 Hr LC50 Gammarus lacustris	0.6 mg/L

Conditions

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

Test & Species

96 Hr LC50 Pimephales promelas	7.19-8.28 mg/L [flow-through]
48 Hr EC50 Daphnia magna	6.14 mg/L

Conditions

Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

Ethyl alcohol (64-17-5)

Test & Species

96 Hr LC50 Oncorhynchus mykiss	12.0 - 16.0 mL/L [static]
96 Hr LC50 Pimephales promelas	>100 mg/L [static]
96 Hr LC50 Pimephales promelas	13400 - 15100 mg/L [flow-through]
48 Hr LC50 Daphnia magna	9268 - 14221 mg/L
24 Hr EC50 Daphnia magna	10800 mg/L
48 Hr EC50 Daphnia magna	2 mg/L [Static]

Conditions

Ethylbenzene (100-41-4)

Test & Species

96 Hr LC50 Oncorhynchus mykiss	11.0-18.0 mg/L [static]
96 Hr LC50 Oncorhynchus mykiss	4.2 mg/L [semi- static]
96 Hr LC50 Pimephales promelas	7.55-11 mg/L [flow- through]
96 Hr LC50 Lepomis macrochirus	32 mg/L [static]
96 Hr LC50 Pimephales promelas	9.1-15.6 mg/L [static]
96 Hr LC50 Poecilia reticulata	9.6 mg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata	4.6 mg/L
96 Hr EC50 Pseudokirchneriella subcapitata	>438 mg/L
72 Hr EC50 Pseudokirchneriella subcapitata	2.6 - 11.3 mg/L [static]
96 Hr EC50 Pseudokirchneriella subcapitata	1.7 - 7.6 mg/L [static]
48 Hr EC50 Daphnia magna	1.8 - 2.4 mg/L

Conditions

Benzene (71-43-2)

Test & Species

96 Hr LC50 Pimephales promelas	10.7-14.7 mg/L [flow-through]
96 Hr LC50 Oncorhynchus mykiss	5.3 mg/L [flow- through]
96 Hr LC50 Lepomis macrochirus	22.49 mg/L [static]
96 Hr LC50 Poecilia reticulata	28.6 mg/L [static]
96 Hr LC50 Pimephales promelas	22330-41160 µg/L [static]
96 Hr LC50 Lepomis macrochirus	70000-142000 µg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata	29 mg/L
48 Hr EC50 Daphnia magna	8.76 - 15.6 mg/L [Static]
48 Hr EC50 Daphnia magna	10 mg/L

Conditions

Hexane (110-54-3)

Test & Species

Conditions

Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

96 Hr LC50 Pimephales promelas 2.1-2.98 mg/L [flow-through]
24 Hr EC50 Daphnia magna >1000 mg/L

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility in Soil

No information available.

*** Section 13 - Disposal Considerations ***

Waste Disposal Instructions

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

Disposal of Contaminated Containers or Packaging

Dispose of contents/container in accordance with local/regional/national/international regulations.

*** Section 14 - Transportation Information ***

IATA Information

Shipping Name: Gasoline

UN #: 1203 Hazard Class: 3 Packing Group: II

ICAO Information

Shipping Name: Gasoline

UN #: 1203 Hazard Class: 3 Packing Group: II

IMDG Information

Shipping Name: Gasoline

UN #: 1203 Hazard Class: 3 Packing Group: II

*** Section 15 - Regulatory Information ***

Regulatory Information

Component Analysis – Inventory

Component/CAS	EC #	EEC	CAN	TSCA
Gasoline, motor fuel 86290-81-5	289-220-8	EINECS	DSL	No
Toluene 108-88-3	203-625-9	EINECS	DSL	Yes
Butane 106-97-8	203-448-7	EINECS	DSL	Yes
Xylenes (o-, m-, p- isomers) 1330-20-7	215-535-7	EINECS	DSL	Yes
Benzene, 1,2,4-trimethyl- 95-63-6	202-436-9	EINECS	DSL	Yes

Safety Data Sheet

Material Name: Gasoline All Grades

SDS No. 9950

Ethyl alcohol 64-17-5	200-578-6	EINECS	DSL	Yes
Ethylbenzene 100-41-4	202-849-4	EINECS	DSL	Yes
Benzene 71-43-2	200-753-7	EINECS	DSL	Yes
Hexane 110-54-3	203-777-6	EINECS	DSL	Yes

*** Section 16 - Other Information ***

Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; ADG = Australian Code for the Transport of Dangerous Goods by Road and Rail; ADR/RID = European Agreement of Dangerous Goods by Road/Rail; AS = Standards Australia; DFG = Deutsche Forschungsgemeinschaft; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EU = European Union; HMIS = Hazardous Materials Identification System; IARC = International Agency for Research on Cancer; IMO = International Maritime Organization; IATA = International Air Transport Association; MAK = Maximum Concentration Value in the Workplace; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NOHSC = National Occupational Health & Safety Commission; NTP = National Toxicology Program; STEL = Short-term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

Literature References

None

Other Information

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

End of Sheet