

Material Safety Data Sheet

Prepared According to the OSHA Hazard Communication Standard (29 CFR 1910.1200).
(Formerly Called MATERIAL INFORMATION BULLETIN)



CHEVRON Regular Gasoline

CPS 201305

DANGER!

HARMFUL OR FATAL IF SWALLOWED. VAPOR HARMFUL
LONG-TERM EXPOSURE TO VAPOR HAS CAUSED CANCER IN
LABORATORY ANIMALS
MAY CAUSE EYE AND SKIN IRRITATION. EXTREMELY FLAMMABLE
CONTAINS LEAD. KEEP OUT OF REACH OF CHILDREN

TYPICAL COMPOSITION

Blend of paraffins, naphthenes, aromatics and olefins
including less than the percentages indicated for the
following: 25% toluene (CAS 106-86-3), 20% xylenes
(CAS 1330-20-7), 10% methyl tert butyl ether (MTBE)
(CAS 1634-04-4), 5% benzene (CAS 71-43-2), 5% n-hexane
(CAS 110-54-3), 5% cyclohexane (CAS 110-82-7), 5% ethyl
benzene (CAS 100-41-4), 5% naphthalene (CAS 91-20-3),
1 g/gal lead (as lead alkyl), 0.1% other additives
including ethylene dibromide (CAS 106-93-4) and
ethylene dichloride (CAS 107-06-2).

EXPOSURE STANDARD

The ACGIH (1986-87) TLV for gasoline is 300 ppm for a daily 8-hour exposure. No
Federal OSHA exposure standard has been established for this material. See
Additional Health Data for discussion of benzene exposure limits.

PHYSIOLOGICAL & HEALTH EFFECTS

Eye irritation may result from contact
with the liquid or exposure to the vapor.
The scientific literature warns that vapor
concentrations above 500 ppm are
irritating.

Prolonged or frequently repeated liquid
contact may cause skin irritation or may
cause the skin to become cracked or dry
from the defatting action of this
material. See Additional Health Data.

Prolonged or repeated breathing of
gasoline vapor may be harmful. See
Additional Health Data.

This material is expected to be only
slightly toxic by ingestion. Note to
Physician: See Additional Health Data.

EMERGENCY & FIRST AID PROCEDURES

Eyes

Flush eyes immediately with fresh water
for at least 15 minutes while holding the
eyelids open. If irritation persists, see
a doctor.

Skin

Wash skin thoroughly with soap and water.
See a doctor if any signs or symptoms
described in this MSDS develop or if any
skin irritation occurs. Launder
contaminated clothing.

Inhalation

Move exposed person to fresh air. If
breathing has stopped, apply artificial
respiration. Call a doctor immediately.
See Respiratory Protection, Page 2.

Ingestion

If swallowed, DO NOT make person vomit.
Call a doctor immediately.

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ADDITIONAL HEALTH DATA

Ingestion of gasoline or inhalation of gasoline vapor at airborne concentrations exceeding 1000 ppm may cause signs and symptoms of central nervous system depression such as headache, dizziness, loss of appetite, weakness and loss of coordination. Vapor concentrations in excess of 5000 ppm may cause loss of consciousness, coma and death. Intentional exposures to excessively high concentrations (e.g., when used as a drug of abuse) have been reported to result in clinical manifestations that may include convulsions, delirium, and hallucinations. These manifestations are not known to occur following accidental inhalation of vapor or skin contact with gasolines during normal operations. Brief exposures to high vapor concentrations may also cause pulmonary edema and bronchitis. Note to Physician: Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

This product may contain up to 4.9% benzene. Repeated or prolonged breathing of benzene vapors has been associated with the development of chromosomal damage in experimental animals and various blood diseases in humans ranging from aplastic anemia to leukemia (a form of cancer). All of these diseases can be fatal. Following a two-year cancer bioassay sponsored by the National Toxicology Program, NTP concluded that benzene is a carcinogen for rats and mice of both sexes. In its Monograph Supplement 4, the International Agency for Research on Cancer (IARC) listed benzene in Group 1, chemicals carcinogenic to humans. No teratogenic effects have been shown to occur in pregnant laboratory animals exposed to doses not acutely toxic to the mother. However, some evidence of fetotoxicity such as delayed physical development has been seen at such levels. The available information on the effects of benzene on human pregnancies is inadequate but it has been established that benzene can cross the human placenta. Note: Limiting the total hydrocarbon exposure to 300 ppm, the ACGIH TLV for gasoline, may not keep the benzene concentration below the 10 ppm Federal OSHA exposure standard and ACGIH TLV for benzene.

This product contains n-hexane. Prolonged or repeated contact with n-hexane may produce peripheral neuropathy characterized by progressive weakness and numbness in the extremities, loss of deep tendon reflexes and reduction of motor nerve conduction velocity. Recovery ranges from no recovery to complete recovery depending upon the duration of exposure and the severity of the nerve damage.

This product contains toluene. Toluene has been reported to decrease immunological responses in test animals. It has also been reported that when young rats were exposed to 1000 ppm toluene for 14 hours daily, for two weeks, irreversible hearing loss was detected. The same daily exposure to 700 ppm for as long as 16 weeks was without effect. Since the level necessary to produce hearing loss is greater than 7 times the 1985-86 ACGIH TLV for toluene, worker exposures at or below 100 ppm is not expected to cause any adverse effect. There are also reports that chronic abusers (glue sniffers, solvent huffers) of solvents containing toluene have suffered liver, kidney and brain damage. Scientific studies on toluene have failed to demonstrate teratogenicity in rats and mice. However, toluene has been shown to cause delayed growth and extra ribs in the offspring of rats and mice at inhaled doses (266-399 ppm) that were non-toxic to the mother. Toluene has not conclusively been shown to cause adverse reproductive effects in humans.

This product contains xylene. Xylene has been reported to be embryotoxic, teratogenic and to cause developmental disturbances in rats exposed in utero.

The American Petroleum Institute (API) sponsored a study where laboratory animals were exposed to 67, 292 and 2056 ppm unleaded gasoline vapor six hours/day, five days/week for approximately two years. Each exposure group consisted of 200 rats and 200 mice. During the course of the study, male rats had an increased incidence of kidney damage followed by repair and enlargement of the kidney tubules. At the end of the study, a dose-related incidence of microscopic kidney tumors was detected in the male rats; two tumors were found in the low exposure group, and five were found in the high exposure group. Female rats and both male and female mice did not show this type of lesion. It was noted in the study that the animals that were exposed to gasoline vapor lived longer than the control. Thus, the significance of the tumor findings is difficult to evaluate at this time. Additional findings in the API-sponsored study, which were observed only at the highest dose tested (2065 ppm), included (1) failure to gain body weight, (2) increased incidence of hepatocellular carcinomas (liver cancer) in female mice, and (3) lung inflammation in male and female rats. Subsequent testing has shown that the six to ten carbon isoparaffinic compounds in gasoline are apparently responsible for the early kidney damage seen in the male rat in the API study although the larger isoparaffins have not been individually tested. Information collected by the API and others indicates that the damage occurs only in the male rat, does not occur in female rats or mice and monkeys of either sex and may not occur in man. How this early kidney injury relates to the development of kidney tumors seen in the API study is currently unknown.

The significance to man of the results of the studies discussed above is not known. While we believe that low level or infrequent exposure to gasoline vapor is not likely to cause cancer or other serious disease, in light of the above information, the precautions outlined in this MSDS should be carefully observed. If strong odor of gasoline is present or if any irritation occurs, individuals should leave the area or institute suitable protective measures (see page 2 - Special Protective Information).

SPECIAL PRECAUTIONS

NEVER siphon gasoline by mouth. READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

Use only as a motor fuel. Do not use for cleaning, pressure appliance fuel, or any other such use. DO NOT USE OR STORE near flame, sparks or hot surfaces. USE AND STORE ONLY IN COOL, WELL VENTILATED AREA. Keep container closed. DO NOT TRANSFER LIQUID TO AN UNLABELED CONTAINER. DO NOT weld, heat or drill container. Replace cap or bung. Emptied container still contains hazardous or explosive vapor or liquid.

HMS Hazard Rating:

Reactivity: 0, Flammability: 3, Health: 1* (*) Long-term exposure to vapor has caused cancer in laboratory animals.