

Material Safety Data Sheet

Chevron TECHRON® Concentrate

MSDS: 1625 Revision #: 29 Revision Date: 02/25/00

Click here to search the <u>product data sheet</u> database

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON TECHRON Concentrate

PRODUCT NUMBER(S): CPS266362

SYNONYM: CHEVRON Techron Concentrate Fuel System Cleaner

Gasoline and Diesel Fuel Additive

COMPANY IDENTIFICATION EMERGENCY TELEPHONE NUMBERS

CHEVRON PRODUCTS COMPANY
CONSUMER PRODUCTS TEAM
555 MARKET STREET
SAN FRANCISCO, CA 94105
www.chevron-lubricants.com

HEALTH (24 hr): (800)231-0623 or (510)231-0623 (International) TRANSPORTATION (24 hr): CHEMTREC (800)424-9300 or (703)527-3887 Emergency Information Centers are located in U.S.A.

NA

Int'l collect calls accepted

PRODUCT INFORMATION: MSDS REQUEST: (800) 414-6737 email:lubemsds@chevron.com ENVIRONMENTAL, SAFETY & HEALTH INFO.: (415) 894-0434

PRODUCT INFORMATION: (510) 242-5357

2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % CHEVRON TECHRON Concentrate

CONTAINING

COMPONENTS AMOUNT LIMIT/QTY AGENCY/TYPE

SOLVENTS INCLUDING:

> 20.00%

SOLVENT NAPHTHA, LT. AROMATIC

Chemical Name: SOLVENT NAPHTHA, LIGHT AROMATIC CAS64742956 NONE

STODDARD SOLVENT

Chemical Name: STODDARD SOLVENT

CAS8052413 100 ppm ACGIH TWA 2900 mg/m3 OSHA PEL

HYDROTREATED, DISTILLATE, LT.

Chemical Name: DISTILLATES, HYDROTREATED LIGHT CAS64742478

INCLUDING

TRIMETHYLBENZENE-1,2,4

Chemical Name: BENZENE, 1,2,4, TRIMETHYL

CAS95636 < 8.00% 25 ppm ACGIH TWA

XYLENE

Chemical Name: BENZENE, DIMETHYL-

ACGIH TWA ACGIH STEL CAS1330207 < 3.55% 100 ppm 150 ppm

100 ppm 100 LBS

OSHA PEL CERCLA 302.4 RQ

NA

CUMENE

Chemical Name: BENZENE, (1-METHYLETHYL) -

ACGIH TWA CAS98828 < 1.50% 50 ppm 50 ppm OSHA PEL

5,000 LBS CERCLA 302.4 RQ

COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.

3. HAZARDS IDENTIFICATION

Clear, colorless to pale yellow liquid.

- COMBUSTIBLE LIQUID AND VAPOR
- HARMFUL OR FATAL IF SWALLOWED CAN ENTER LUNGS AND CAUSE DAMAGE
- CAUSES EYE AND SKIN IRRITATION
- MAY BE HARMFUL IF INHALED CAUSES HEADACHE, DROWSINESS, OR OTHER EFFECTS TO THE NERVOUS SYSTEM

IMMEDIATE HEALTH EFFECTS

EYE:

Contact with the eyes causes irritation.

Contact with the skin causes irritation. Not expected to be harmful to internal organs if absorbed through the skin.

INGESTION:

If swallowed, this substance is considered practically non-toxic to internal organs. Because of its low viscosity, this material can directly enter the lungs, if swallowed, or if subsequently vomited. Once in the lungs it is very difficult to remove and can cause severe injury or death. INHALATION:

Breathing the vapors at concentrations above the recommended exposure standard can cause central nervous system effects.

SIGNS AND SYMPTOMS OF EXPOSURE:

Eye irritation: may include pain, tearing, reddening, swelling, and impaired vision. Skin irritation: may include pain, reddening, swelling, and blistering. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss of coordination, blurred

vision, drowsiness, confusion, or disorientation. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death.

4. FIRST AID MEASURES

EYE:

Flush eyes with water immediately while holding the eyelids open. Remove contact lenses, if worn, after initial flushing, and continue flushing for at least 15 minutes. Get medical attention if irritation persists. SKIN:

Wash skin immediately with soap and water and remove contaminated clothing and shoes. Get medical attention if irritation persists. Discard contaminated clothing and shoes or thoroughly clean before reuse. INGESTION:

If swallowed, do not induce vomiting. Give the person a glass of water or milk to drink and get immediate medical attention. Never give anything by mouth to an unconscious person.

INHALATION:

Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms continue.

NOTE TO PHYSICIANS:

Ingestion of this product or subsequent vomiting may result in aspiration of light hydrocarbon liquid, which may cause pneumonitis.

5. FIRE FIGHTING MEASURES

FIRE CLASSIFICATION:

Classification (29 CFR 1910.1200): Combustible liquid. See section 7 for appropriate handling and storage conditions.

FLAMMABLE PROPERTIES:

FLASH POINT: (TCC) 105F (41C) Min.

AUTOIGNITION: 660F (349C) Min.

FLAMMABILITY LIMITS (\$ by volume in air): Lower: NDA Upper: NDA

EXTINGUISHING MEDIA:

CO2, dry chemical, foam and water fog.

NFPA RATINGS: Health 1; Flammability 2; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS:

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

COMBUSTION PRODUCTS:

Normal combustion forms carbon dioxide, water vapor and may produce oxides of nitrogen. Incomplete combustion can produce carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:

CHEMTREC EMERGENCY NUMBER (24 hr): (800)424-9300 or (703)527-3887 International Collect Calls Accepted

Eliminate all sources of ignition in the vicinity of the spill or released vapor.

Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or

groundwater. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

Release of this product should be prevented from contaminating soil and water and from entering drainage and sewer systems. U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number for the U.S. Coast Guard National Response Center is (800) 424-8802.

7. HANDLING AND STORAGE

Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 85F.

The hydrocarbon solvent in this product may accumulate at flammable or explosive levels in the headspace of storage containers. Do not use or store near heat, sparks, or open flames. Use or store only in a well-ventilated area. Keep container closed when material is not in use.

Avoid work practices that may release volatile components into the atmosphere. Local air pollution regulations should be consulted to determine if the release of volatile components is regulated or restricted in the area in which this material is used.

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not, by themselves, be sufficient. Review all operations which have the potential of generating an accumulation of electrostatic charge and/or a flammable atmosphere (including tank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering, mixing, agitation, and vacuum truck operations) and use appropriate mitigating procedures. For more information, refer to OSHA Standard 29 CFR 1910.106, "Flammable and Combustible Liquids", National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity", and/or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents".

Do not breathe vapor or fumes. Do not taste or swallow. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. Keep out of reach of children. Avoid contaminating soil or releasing this material into sewage and drainage systems and bodies of water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

GENERAL CONSIDERATIONS:

Consider the potential hazards of this material (see Section 3), 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.

ENGINEERING CONTROLS

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION:

No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as a good safety practice. SKIN PROTECTION:

No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances. Suggested materials for protective gloves include: <Nitrile> <Polyurethane> <Viton> <Chlorinated Polyethylene (or Chlorosulfonated Polyethylene or CPE)> RESPIRATORY PROTECTION:

Determine if airborne concentrations are below the recommended exposure limits. If not, wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following respirators: Organic Vapor. 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:

Clear, colorless to pale yellow liquid.

pH: NA

VAPOR PRESSURE: 0.1 PSIA @ 37.8 (Reid) (Min.)

VAPOR DENSITY

(AIR=1): NDA

BOILING POINT: 300F (149C)

FREEZING POINT: NA
MELTING POINT: NA

SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.

SPECIFIC GRAVITY: 0.88 @ 15.6/15.6C (Min.) VISCOSITY: 9.0 cst @ 40C (Min.)

10. STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:

None known.

CHEMICAL STABILITY:

Stable.

CONDITIONS TO AVOID:

See section 7.

INCOMPATIBILITY WITH OTHER MATERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates,

peroxides, etc.

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS:

The eye irritation hazard is based on an evaluation of the data for the components.

SKIN EFFECTS:

The skin irritation hazard is based on an evaluation of the data for the components.

ACUTE ORAL EFFECTS:

The acute oral toxicity is based on an evaluation of the data for the components.

ACUTE INHALATION EFFECTS:

The acute respiratory toxicity is based on an evaluation of the data for the components.

ADDITIONAL TOXICOLOGY INFORMATION:

COMPONENT: Light Aromatic Solvent Naphtha (CAS 64742-95-6, also described as High-Flash Aromatic Naphtha, Type I as defined by ASTM D-3734). SUBCHRONIC TOXICITY: In a 13-week rat inhalation study using dose levels of 0, 100, 500, and 1500 ppm for 6 hours/day, 5days/week, no target organ toxicity including neurotoxicity was observed at any dose level. Slight general systemic toxicity (decreased body weight gain) was observed at 1500 ppm. DEVELOPMENTAL TOXICITY: In a mouse inhalation study using dose levels of 0, 100, 500, and 1500 ppm for 6 hours/day on gestation days 6-15, no signs of maternal toxicity or developmental toxicity were observed at 100 ppm. At 500 ppm, maternal toxicity (decreased body weight gain) and developmental toxicity (decreased fetal body weight) were observed. Severe maternal toxicity (44% mortality, decreased body weight gain, clinical signs of toxicity) and developmental toxicity (decreased number of live fetuses per litter, increased postimplantation losses per dam, decreased fetal body weights, delayed ossification, cleft palate) were observed at 1500 ppm. In a rat inhalation study using dose levels of 600, 1000, and 2000 mg/m3 for 24 hours/day on gestation days 7-15, signs of maternal toxicity (decreased body weight gain) were observed at all dose levels. At 600 mg/m3, no signs of fetal or developmental toxicity were observed. Signs of fetal toxicity (decreased male fetal body weight) and developmental toxicity (delayed ossification) were observed at 1000 and 2000 mg/m3. REPRODUCTIVE TOXICITY: In a rat 3-generation inhalation study using dose levels of 0, 100, 500, and 1500 ppm 6 hours/day, 5 days/week, no signs of general systemic or reproductive toxicity were observed at 100 ppm. At 500 ppm, slight parental toxicity (decreased body weight gain) and postnatal toxicity (decreased pup body weight) were observed, but reproductive parameters were not affected. Severe parental toxicity (mortality, decreased body weight gain, clinical signs of toxicity) and postnatal toxicity (decreased pup body weight) were observed at 1500 ppm, but reproductive parameters were not affected. GENETIC TOXICITY: No evidence of genetic toxicity was observed in the following tests: Salmonella typhimurium reverse mutation assay (Ames test), in vitro Chinese Hamster Ovary (CHO) cell HGPRT mutation assay, in vitro Chinese Hamster Ovary (CHO) cell chromosomal aberration assay, in vitro Chinese Hamster Ovary (CHO) cell sister chromatid exchange assay, and in vivo rat bone marrow chromosome aberration assay.

This product contains Stoddard solvent, a mixture of straight and branched-chain paraffins, naphthenes and aromatic hydrocarbons. Based on studies of Stoddard solvent sample 85-01 sponsored by the American Petroleum Institute, the acute dermal LD50 was found to be >3.0 g/kg and the acute oral LD50 was found to >5.0 g/kg. Acute inhalation toxicity tests showed a no observable effect level for inhalation of Stoddard solvent at 4.0 mg/l, with eye irritation and slight loss of coordination at 8 mg/l, and tremors, CNS depression and death within 7.5 hours of exposure to 10 mg/l. In a 28-day dermal study sponsored by the API, moderate skin irritation occurred at 200 mg/kg, with moderate to severe irritation above 1000 mg/kg. The API also determined the primary dermal

irritation index to be 4.5, and the primary eye irritation index to be 0.0 at 24 hours. In human sensory response tests, exposure to Stoddard solvent at 0.60 mg/l caused mild eye and nose irritation after 30 minutes, with increased blink rate and eye irritation at 2.4 mg/l, and eye irritation and tearing at 2.7 mg/l. No significant effects on psychomotor performance were noted.

This product contains xylene. ACUTE TOXICITY: The primary effects of exposure to xylene in animals and humans are on the central nervous system. In addition, in some individuals, xylene exposure can sensitize cardiac tissue to epinephrine which may precipitate fatal ventricular fibrillation. DEVELOPMENTAL TOXICITY: Xylene has been reported to cause developmental toxicity in rats and mice exposed by inhalation during pregnancy. The effects noted consisted of delayed development and minor skeletal variations. In addition, when pregnant mice were exposed by ingestion to a level that killed nearly one-third of the test group, lethality (resorptions) and malformations (primarily cleft palate) occurred. Malformations have not been reported following inhalation exposure. Because of the very high levels of exposure used in these studies, we do not believe that their results imply an increased risk of reproductive toxicity to workers exposed to xylene levels at or below the exposure standard. GENETIC TOXICITY/CARCINOGENICITY: Xylene was not genotoxic in several mutagenicity testing assays including the Ames test. In a cancer study sponsored by the National Toxicology Program (NTP), technical grade xylene gave no evidence of carcinogenicity in rats or mice dosed daily for two years. HEARING: Mixed xylenes have been shown to cause measurable hearing loss in rats exposed to 800 ppm in the air for 14 hours per day for six weeks. Exposure to 1450 ppm xylene for 8 hours caused hearing loss while exposure to 1700 ppm for 4 hours did not. Although no information is available for lower concentrations, other chemicals that cause hearing loss in rats at relatively high concentrations do not cause hearing loss in rats at low concentrations. Worker exposure to xylenes at the permissible exposure limit (100 ppm, time-weighted average) is not expected to cause hearing loss.

This material contains cumene. SUBCHRONIC TOXICITY: Two subchronic inhalation studies, in which rats of each sex were exposed for six hours/day, five days/week for thirteen weeks to 0, 50, 100, 500 or 1200 ppm cumene vapor, found that rats exposed to 500 and 1200 ppm had increases in weights of liver, kidneys and adrenals, and microscopic changes in the kidneys. Decreased motor activity in male rats exposed to 500 and 1200 ppm was observed in the first study, but was not duplicated in the second study. Cataracts in the lenses of the eyes, which occured in both treated and untreated rats in the first study, were not statistically higher in treated animals in the second study, indicating that cumene did not cause cataracts. There were no exposure-related changes in hearing (auditory brainstem response), spermatogenesis or responses in the functional observation battery. DEVELOPMENTAL TOXICITY: In inhalation developmental toxicity studies, there was no evidemce of developmental effects either in rabbits exposed to levels up to 2300 ppm on days 6-8 of gestation or in rats exposed to levels up to 1200 ppm on days 6-15 of gestation. GENETIC TOXICITY: Cumene was not genotoxic in several in vitro assays including the Ames test, and unscheduled DNA synthesis assay and the Chinese hamster ovary cell chromosome aberration assay.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

This material is expected to be harmful to aquatic organisms, and should

be kept out of sewage and drainage systems and all bodies of water. ENVIRONMENTAL FATE:
No data available.

13. DISPOSAL CONSIDERATIONS

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 USEPA under RCRA (40CFR261) 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.

14. TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: PETROLEUM PRODUCT, N.O.S., RQ(XYLENE)

DOT HAZARD CLASS: COMBUSTIBLE LIQUID DOT IDENTIFICATION NUMBER: UN1268

DOT PACKING GROUP: III

SARA 311 CATEGORIES:

ADDITIONAL INFO: NON-BULK PACKAGES ARE NOT REGULATED IN THE U.S.A.

UNLESS SHIPPED BY AIRCRAFT OR VESSEL. 49CFR 173.150(f).

LABEL/PLACARD: COMBUSTIBLE

15. REGULATORY INFORMATION

1. Immediate (Acute) Health Effects: YES
2. Delayed (Chronic) Health Effects: NO
3. Fire Hazard: YES

4. Sudden Release of Pressure Hazard: NO

5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	22=TSCA Sect 5(a)(2)
02=MASS RTK	12=CERCLA 302.4	23=TSCA Sect 6
03=NTP Carcinogen	13=MN RTK	24=TSCA Sect 12(b)
04=CA Prop 65-Carcin	14=ACGIH TWA	25=TSCA Sect 8(a)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	26=TSCA Sect 8(d)
06=IARC Group 1	16=ACGIH Calc TLV	27=TSCA Sect 4(a)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	18=DOT Marine Pollutant	29=OSHA CEILING
09=SARA 302/304	19=Chevron TWA	30=Chevron STEL
10=PA RTK	20=EPA Carcinogen	

The following components of this material are found on the regulatory lists indicated.

BENZENE, DIMETHYL-

is found on lists: 01,02,10,11,12,13,14,15,17,

SOLVENT NAPHTHA, LIGHT AROMATIC

is found on lists: 26,

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STODDARD SOLVENT
  is found on lists: 02,10,11,13,14,17,28,
BENZENE, 1,2,4, TRIMETHYL
 is found on lists: 01,02,10,11,13,14,18,24,27,28,
BENZENE, (1-METHYLETHYL) -
 is found on lists: 01,02,10,11,12,13,14,17,18,24,26,27,28,
EU RISK AND SAFETY LABEL PHRASES:
R10: Flammable.
R 36/38: Irritating to eyes and skin.
R52: Harmful to aquatic organisms.
S51: Use only in well-ventilated areas.
S 24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water
and seek medical advice.
S37: Wear suitable gloves.
S2: Keep out of reach of children.
NEW JERSEY RTK CLASSIFICATION:
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A.
34:5A-1 et. seq., the product is to be identified as follows:
New Jersey Right-To-Know trade secret registry number 01154100-5079P
New Jersey Right-To-Know trade secret registry number 01154100-5018P
New Jersey Right-To-Know trade secret registry number 01154100-5146P
WHMIS CLASSIFICATION:
Class B, Division 3: Combustible Liquids
Class D, Division 2, Subdivision B: Toxic Material
-Skin or Eye Irritation
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16. OTHER INFORMATION

NFPA RATINGS: Health 1; Flammability 2; Reactivity 0; HMIS RATINGS: Health 2; Flammability 2; Reactivity 0; (0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme, PPE:- Personal Protection Equipment Index recommendation, *- Chronic Effect Indicator). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

REVISION STATEMENT:

This revision updates Section 1 (Chemical Product and Company ${\tt ID.}$) and Section 15 (Regulatory Information).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value

STEL - Short-term Exposure Limit

RQ - Reportable Quantity

C - Ceiling Limit

Al-5 - Appendix A Categories

NDA - No Data Available

TWA - Time Weighted Average

TPQ - Threshold Planning Quantity

PEL - Permissible Exposure Limit

CAS - Chemical Abstract Service Number

() - Change Has Been Proposed

NA - Not Applicable

Prepared according to the OSHA Hazard Communication Standard

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the Toxicology and Health Risk Assessment Unit, CRTC, P.O. Box 1627, Richmond, CA 94804

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may

be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.
