



# Material Safety Data Sheet

## Chevron PRO-GARD® Fuel Injector Cleaner

MSDS: 4109 Revision #: 10 Revision Date: 11/20/99

Click here to search the [product data sheet](#) database

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEVRON PRO-GARD Fuel Injector Cleaner

PRODUCT NUMBER(S): CPS266339

#### COMPANY IDENTIFICATION

CHEVRON PRODUCTS COMPANY  
CONSUMER PRODUCTS TEAM  
555 MARKET STREET  
SAN FRANCISCO, CA 94105

#### EMERGENCY TELEPHONE NUMBERS

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.  
Int'l collect calls accepted

PRODUCT INFORMATION: MSDS REQUESTS: (800) 414-MSDS or (800) 414-6737  
ENVIRONMENTAL, SAFETY & HEALTH INFO.: (415) 894-0434  
PRODUCT INFORMATION: (510) 242-5357

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

100.0 % CHEVRON PRO-GARD Fuel Injector Cleaner

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
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SOLVENTS INCLUDING:

> 20.00%

HYDROTREATED, DISTILLATE, LT.

Chemical Name: DISTILLATES, HYDROTREATED	LIGHT		
CAS64742478	NONE		NA

STODDARD SOLVENT

Chemical Name: STODDARD SOLVENT			
CAS8052413	100 ppm 2900 mg/m3		ACGIH TWA OSHA PEL

SOLVENT NAPHTHA, LT. AROMATIC

Chemical Name: SOLVENT NAPHTHA, LIGHT AROMATIC			
CAS64742956	NONE		NA

INCLUDING

TRIMETHYLBENZENE- 1, 2, 4

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

CAS95636

&lt; 3.50%

25 ppm

ACGIH TWA

**COMPOSITION COMMENT:**

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

**3. HAZARDS IDENTIFICATION**

## \*\*\*\*\* EMERGENCY OVERVIEW \*\*\*\*\*

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

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**IMMEDIATE HEALTH EFFECTS****EYE:**

Contact with the eyes causes irritation.

**SKIN:**

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.

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**5. FIRE FIGHTING MEASURES**

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**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:**

CO<sub>2</sub>, 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.

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**6. ACCIDENTAL RELEASE MEASURES**

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**CHEMTREC EMERGENCY NUMBER** (24 hr): (800) 424-9300 or (703) 527-3887

International Collect Calls Accepted

**ACCIDENTAL RELEASE MEASURES:**

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.

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**7. HANDLING AND STORAGE**

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Liquid evaporates and forms vapor (fumes) which can catch fire and burn

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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.

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".

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.

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.

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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### 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.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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**PHYSICAL DESCRIPTION:**

Clear colorless to pale yellow liquid

pH: NDA

VAPOR PRESSURE: 0.59 PSI @ 38C (REID) Min.

VAPOR DENSITY

(AIR=1): NDA

BOILING POINT: NA

FREEZING POINT: NA

MELTING POINT: NA

SOLUBILITY: Soluble in hydrocarbon solvents; insoluble in water.

SPECIFIC GRAVITY: 0.82 @ 15.6/15.6C

EVAPORATION RATE: NDA

VISCOSITY: 1.6 cSt @ 40C

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**10. STABILITY AND REACTIVITY**

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**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.

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**11. TOXICOLOGICAL INFORMATION**

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**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/m<sup>3</sup> 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/m<sup>3</sup>, 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/m<sup>3</sup>. **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 LD<sub>50</sub> was found to be >3.0 g/kg and the acute oral LD<sub>50</sub> 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.

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## 12. ECOLOGICAL INFORMATION

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### 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.

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**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.

DOT HAZARD CLASS: COMBUSTIBLE LIQUID

DOT IDENTIFICATION NUMBER: UN1268

DOT PACKING GROUP: III

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

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

LABEL/PLACARD: COMBUSTIBLE

**15. REGULATORY INFORMATION**

SARA 311 CATEGORIES:	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.

SOLVENT NAPHTHA, LIGHT AROMATIC

is found on lists: 26,

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,

**EU RISK AND SAFETY LABEL PHRASES:**

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R10: Flammable.

R65: Harmful: may cause lung damage if swallowed.

R 36/38: Irritating to eyes and skin.

R20: Harmful by inhalation.

R52: Harmful to aquatic organisms.

S51: Use only in well-ventilated areas.

S62: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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:

FUEL OIL

New Jersey Right-To-Know trade secret registry number 01154100-5179P

New Jersey Right-To-Know trade secret registry number 01154100-5146P

New Jersey Right-To-Know trade secret registry number 01154100-5018P

HMIS CLASSIFICATION:

Class B, Division 3: Combustible Liquids

Class D, Division 2, Subdivision B: Toxic Material

-Skin or Eye Irritation

## 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 2 (Composition) and Section 15 (Regulatory Information).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value

TWA - Time Weighted Average

STEL - Short-term Exposure Limit

TPQ - Threshold Planning Quantity

RQ - Reportable Quantity

PEL - Permissible Exposure Limit

C - Ceiling Limit

CAS - Chemical Abstract Service Number

A1-5 - Appendix A Categories

() - Change Has Been Proposed

NDA - No Data Available

NA - Not Applicable

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, CRTIC, P.O. Box 1627, Richmond, CA 94804

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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

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condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

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