

Material Safety Data Sheet

AC DELCO ANTIFREEZE/COOLANT

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Classified as hazardous

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Product Name AC DELCO ANTIFREEZE/COOLANT
Product Code CPS227800
Company Name ChevronTexaco Global Lubricants
Address 6001 Bollinger Canyon Rd San Ramon
 CA 94583

Other Names	Name	Product Code
	CHEVRON SUPREME ANTIFREEZE/COOLANT	

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Name	CAS	Proportion
	Ethylene glycol	107-21-1	90-97 %
	Diethylene Glycol	111-46-6	1-5 %
	Dipotassium phosphate	7758-11-4	1-5 %

3. HAZARDS IDENTIFICATION

- HARMFUL OR FATAL IF SWALLOWED
- CAUSES EYE IRRITATION
- POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL THAT MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA
- MAY CAUSE DAMAGE TO:
- KIDNEY

Human Health Effects	DELAYED OR OTHER HEALTH EFFECTS: Reproduction and Birth Defects: Contains material that may be harmful to the developing fetus based on animal data. Target Organs: Contains material that may cause damage to the following organ(s) following repeated ingestion based on animal data: Kidney See Section 11 for additional information. Risk depends on duration and level of exposure.
Inhalation	The vapor or fumes from this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Breathing this material at concentration above the recommended exposure limits may cause central nervous system effects. 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.
Ingestion	Toxic; may be harmful or fatal if swallowed.
Skin	Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.
Eye	Contact with the eyes causes irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision.

4. FIRST AID MEASURES

Inhalation	Move the exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if breathing difficulties continue.
Ingestion	If swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.
Skin	To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse.
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.

5. FIRE FIGHTING MEASURES

Fire Fighting Instructions: This material will burn although it is not easily ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Extinguishing Media	Dry Chemical, CO2, AFFF Foam or alcohol resistant foam
Specific	FIRE CLASSIFICATION:

Hazards OSHA Classification (29 CFR 1910.1200): Not classified by OSHA as flammable or combustible.
NFPA RATINGS: Health: 2 Flammability:
1 Reactivity: 0

Hazardous Combustion Products Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentified organic compounds will be evolved when this material undergoes combustion. Combustion may form oxides of: Phosphorus, Potassium .

Flash Point (Pensky-Martens Closed Cup) 260 °F (127 °C)

Ignition Temperature NDA

Flammable Limits LEL 3.2

6. ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material.

Spill Management: Stop the source of the release if you can do it without risk. Contain release to prevent further contamination of soil, surface water or groundwater. Clean up spill as soon as possible, observing precautions in Exposure Controls/Personal Protection. Use appropriate techniques such as applying non-combustible absorbent materials or pumping. Where feasible and appropriate, remove contaminated soil. Place contaminated material in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National Response Center at (800) 424-8802 as appropriate c required.

7. HANDLING AND STORAGE

Precautionary Measures: Do not get in eyes. Wash thoroughly after handling. Do not breathe vapor or fumes.

General Handling Information: Do not taste or swallow antifreeze or solution. Keep out of the reach of children and animals.

Static Hazard: 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'.

General Storage Information: Do not store in open or unlabeled containers.

Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue (solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. They may explode and cause injury or death. Empty containers should be completely drained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Controls, Personal Protection

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.

National Exposure Standards

Component	Limit	TWA	STEL	Ceiling	Notation
Ethylene Glycol	ACGIH				39.4 ppm (weight)
Ethylene Glycol	ACGIH_TLV				100 mg/m3
Ethylene Glycol	OSHA_PEL				125 mg/m3

Respiratory Protection

Determine if airborne concentrations are below the recommended exposure limits. If not, wear an approved respirator that provides adequate protection from measured concentrations of this material, such as: Air-Purifying Respirator for Organic Vapors, Dusts and Mists.
Use a positive pressure air-supplying respirator in circumstances where air-purifying respirators may not provide adequate protection.

Eye Protection

Wear protective equipment to prevent eye contact. Selection of protective equipment may include safety glasses, chemical goggles, face shields, or a combination depending on the work operations conducted.

Hand Protection

Suggested materials for protective gloves include: Natural rubber, Neoprene, Nitrile Rubber, Polyvinyl Chloride (PVC or Vinyl).

Body Protection

No special protective clothing is normally required. Where splashing is possible, select protective clothing depending on operations conducted, physical requirements and other substances in the workplace.

Eng. Controls

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Odour NDA

Boiling Point 226 °F (109 C)

Solubility in Water Miscible

Specific Gravity (H2O=1) 1.13 @ 15.6 °C / 15.6 °C

pH Value 10.2 - 11

Vapour Pressure <0.1 mmHg @ 20 °C

Vapour Density (Air=1) 2.1 (Typical)

Physical State NDA

Viscosity 17.3 cP @ 25 °C (Typical)

Colour NDA

Flash Point (Pensky-Martens Closed Cup) 260 °F (127 °C)

Ignition Temperature NDA

Flammable Limits LEL 3.2

Other Information Freezing Point: -34 °F (-37 C)

10. STABILITY AND REACTIVITY

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

Hazardous

Polymerization Hazardous polymerization will not occur.

Materials to Avoid May react with strong oxidizing agents, such as chlorates, nitrates peroxides, etc.

Hazardous

Decomposition

Products Ketones (Elevated temperatures), Aldehydes (Elevated temperatures)

11. TOXICOLOGICAL INFORMATION

Toxicology Information	<p>This product contains ethylene glycol (EG). The toxicity of EG via inhalation or skin contact is expected to be slight at room temperature. The estimated oral lethal dose is about 100 cc (3.3 oz.) for an adult human. Ethylene glycol is oxidized to oxalic acid which results in the deposition of calcium oxalate crystals mainly in the brain and kidneys. Early signs and symptoms of EG poisoning may resemble those of alcohol intoxication. Later, the victim may experience nausea, vomiting, weakness, abdominal and muscle pain, difficulty in breathing and decreased urine output. When EG was heated above the boiling point of water, vapor formed which reportedly caused unconsciousness, increased lymphocyte count, and a rapid, jerky movement of the eyes in persons chronically exposed. When EG was administered orally to pregnant rats and mice, there was an increase in fetal deaths and birth defects. Some of these effects occurred at doses that had no toxic effects on the mothers. We are not aware of any reports that EG causes reproductive toxicity in human beings.</p> <p>This product contains diethylene glycol (DEG). The estimated oral lethal dose is about 50 cc (1.6 oz) for an adult human. DEG has caused the following effects in laboratory animals: liver abnormalities, kidney damage and blood abnormalities. It has been suggested as a cause of the following effects in humans: liver abnormalities, kidney damage, lung damage and central nervous system damage.</p>
Inhalation	<p>The vapor or fumes from this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Breathing this material at concentration above the recommended exposure limits may cause central nervous system effects. 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.</p>
Ingestion	<p>Toxic; may be harmful or fatal if swallowed.</p>
Skin	<p>Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin.</p>
Eye	<p>Contact with the eyes causes irritation. Symptoms may include pain, tearing, reddening, swelling and impaired vision.</p>
Acute Toxicity - Oral	<p>The acute oral toxicity hazard is based on evaluation of data for similar materials or product components.</p>
Acute Toxicity - Dermal	<p>The acute dermal toxicity hazard is based on evaluation of data for similar materials or product components.</p>
Acute Toxicity - Inhalation	<p>The acute inhalation toxicity hazard is based on evaluation of data for similar materials or product components.</p>
Eye Irritation	<p>The eye irritation hazard is based on evaluation of data for similar materials or product components.</p>
Skin Irritation	<p>The skin irritation hazard is based on evaluation of data for similar materials or product components.</p>
Skin Sensitisation	<p>No product toxicology data available.</p>

12. ECOLOGICAL INFORMATION

ECOTOXICITY

The toxicity of this material to aquatic organisms has not been evaluated. Consequently, this material should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE

This material is expected to be readily biodegradable.

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 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.

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: NOT REGULATED AS A HAZARDOUS MATERIAL FOR TRANSPORTATION UNDER 49 CFR

DOT Hazard Class: NOT APPLICABLE

DOT Identification Number: NOT APPLICABLE

DOT Packing Group: NOT APPLICABLE

Additional Information: Bulk shipments with a reportable quantity (5000 pounds) of ethylene glycol are a hazardous material. The Proper Shipping Name is :

Environmentally Hazardous Substance, Liquid, N.O.S. (ethylene glycol), 9, UN3082, III, RQ (ethylene glycol).

IMO/IMDG Shipping Name: NOT REGULATED AS DANGEROUS GOODS FOR TRANSPORTATION UNDER THE IMDG CODE

IMO/IMDG Hazard Class: NOT APPLICABLE

IMO/IMDG Identification Number: NOT APPLICABLE

IMO/IMDG Packing Group: NOT APPLICABLE

15. REGULATORY INFORMATION

SARA 311/312 CATEGORIES:

Effects: YES

Effects: YES

Hazard:

1. Immediate (Acute) Health

2. Delayed (Chronic) Health

3. Fire

NO

Hazard: NO

4. Sudden Release of Pressure

Hazard: NO

5. Reactivity

REGULATORY LISTS SEARCHED:

4_11=IARC Group 1
15=SARA Section 313
4_I2A=IARC Group 2A
16=CA Proposition 65
4_I2B=IARC Group 2B
17=MA RTK
05=NTP Carcinogen
18=NJ RTK
06=OSHA Carcinogen
19=DOT Marine Pollutant
09=TSCA 12(b)
20=PA RTK

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

Ethylene Glycol
15, 17, 18, 20

CERCLA REPORTABLE QUANTITIES (RQ) / SARA 302 THRESHOLD PLANNING QUANTITIES (TPQ):

Component
Component RQ
Component TPQ
Product RQ
Ethylene Glycol
5000 lbs
None
5270 lbs

CHEMICAL INVENTORIES:

AUSTRALIA: All the components of this material are listed on the Australian Inventory of Chemical Substances (AICS).

CANADA: All the components of this material are on the Canadian DSI or have been notified under the New Substance Notification Regulations, but have not yet been published in the Canada Gazette.

PEOPLE'S REPUBLIC OF CHINA: All the components of this product are listed on the draft Inventory of Existing Chemical Substances in China.

EUROPEAN UNION: All the components of this material are in compliance with the EU Seventh Amendment Directive 92/32/EEC.

JAPAN: This material contains components that require notification before sale or importation into Japan.

KOREA: All the components of this product are on the Existing Chemicals List (ECL) in Korea.

PHILIPPINES: All the components of this product are listed on the Philippine Inventory of Chemicals and Chemical Substances (PICCS).

UNITED STATES: All of the components of this material are on the Toxic Substances Control Act (TSCA) Chemical Inventory.

NEW JERSEY RTK CLASSIFICATION:

Refer to components listed in Section 2.

WHMIS CLASSIFICATION:

Class D, Division 1, Subdivision B: Toxic Material - Acute Lethality

Class D, Division 2, Subdivision A: Very Toxic Material - Teratogenicity and Embryotoxicity

Class D, Division 2, Subdivision B: Toxic Material - Chronic Toxic Effects
Skin or Eye Irritation

Risk Phrase

R22 Harmful if swallowed.

R36 Irritating to eyes.

Safety Phrase S46 If swallowed, seek medical advice immediately and show this container or label.
S24/25 Avoid contact with skin and eyes.

Hazard Category Harmful, Irritant

16. OTHER INFORMATION

References NFPA
RATINGS: Health: 2 Flammability: 1 Reactivity: .

HMIS RATINGS: Health: 2* Flammability: 1
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 the following sections of this Material Safety Data Sheet: 1, 2, 3, 11, 14

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:
TLV - Threshold Limit Value
TWA - Time Weighted Average
STEL - Short-term Exposure Limit
PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number
NDA - No Data Available
NA - Not Applicable
<= - Less Than or Equal To
>= - Greater Than or Equal To

Prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by the ChevronTexaco Energy Research & Technology Company, 100 Chevron Way, Richmond, California 94802.

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 modifications 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.

User Codes	User Title Label	User Code
	Approval Number	9590
	Part Number	12378371
	Part Number	12378372
	Part Number	12378373
	Part Number	12378374
	Part Number	12378375

Hazard Category Harmful, Irritant

End of MSDS

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