

SAFETY DATA SHEET

CR-50

Complies with OSHA's Hazard Communication Standard 29 CFR 1910.1200.

Preparation: January 24, 1997
Review / Revision: May 2014

1. IDENTIFICATION

Part No. & Description: CR-50, Oil Carrier for CR-14A Powder, Isoparaffinic Hydrocarbon.

Product Use: Solvent **Product Number:** 0001016734 **Synonyms:** None established **Product CAS No.:** 68551-19-9

Manufacturer: Chevron Phillips Chemical Company LP **Distributor:** Goodson Tools & Supplies

Specialty Chemicals

156 Galewski Drive

10001 Six Pines Drive

Winona, MN 55987

The Woodlands, TX 77380

507-452-1830 or 800-533-8010

800-852-5530

Emergency Phone: 800-924-6804 (24 hours)

HEALTH: Chevron Phillips Emergency Information Center 866-442-9628 (North America) and 832-813-4984 (International).

TRANSPORTATION: North America: CHEMTREC 800-424-9300 or 703-527-3887

ASIA: +1-703-527-3887

EUROPE: BIG .32.14.584545 (phone) or .32.14.583516 (telefax)

SOUTH AMERICA SOS-Cotec- Inside Brazil: 0800.111.767

Outside Brazil: 55.19.3467.1600

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Colorless liquid at room temperature. Mild hydrocarbon odor.

-COMBUSTIBLE LIQUID AND VAPOR

-HARMFUL OR FATAL IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE

-MAY CAUSE RESPIRATORY TRACT IRRITATION IF INHALED

IMMEDIATE HEALTH EFFECTS:

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Prolonged or repeated skin contact may cause drying or defatting of the skin. Symptoms may include pain, itching, discoloration, swelling, and blistering. Not expected to be harmful to internal organs if absorbed through the skin.

Ingestion: 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: Not expected to be harmful if inhaled.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>COMPONENT</u>	<u>CAS NUMBER</u>	<u>AMOUNT</u>	<u>EINECS</u>	<u>SYM</u>	<u>R-PHRASES</u>
C12-C14 ISOALKANES	68551-19-9	100% weight	271-369-5	NA	NA

Occupational Exposure Limits:

<u>Component</u>	<u>Limit</u>	<u>TWA</u>	<u>STEL</u>	<u>Ceiling/Peak</u>	<u>Notation</u>
C12-C14 ISOALKANES	ACGIH	Not Established	NA	NA	NA
C12-C14 ISOALKANES	CPCHEM	1200 mg/m3	NA	NA	C9-C15 Aliphatics

4. FIRST AID MEASURES

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

SKIN: To remove the material from skin, use soap and water. Discard contaminated clothing and shoes or thoroughly clean before reuse. Get medical attention if any symptoms develop.

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 breathing difficulties 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

See Section 7 for proper handling and storage.

FIRE CLASSIFICATION:

OSHA Classification (29 CFR 1910.1200): Combustible liquid.

NFPA RATINGS: Health: 1 Flammability: 1 Reactivity: 0

FLAMMABLE PROPERTIES:

Flash Point: >79.4°C (>174.9°F) (Tag Closed Cup)

Autoignition: NDA

Flammability (Explosive) Limits (% by volume in air): Lower: NDA Upper: NDA

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: CAUTION! COMBUSTIBLE. Clear fire area of all non-emergency personnel. Only enter confined fire space with full bunker gear, including a positive pressure, NIOSH-approved, self-contained breathing apparatus. Cool surrounding equipment. Container areas exposed to direct flame contact should be cooled with large quantities of water (500 gallons water/min flame impingement exposure) to prevent weakening of container structure.

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: Carbon Monoxide, Carbon Dioxide.

6. ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in the vicinity of the spill or released vapor. If this material is released into the work area, evacuate the area immediately. Monitor area with combustible gas indicator. Wear appropriate personal protective equipment when cleaning up spills. Refer to Section 8. Eliminate potential sources of ignition. Handling equipment must be bonded and grounded to prevent sparking.

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 sorbent materials or pumping. All equipment used when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: U.S.A. regulations may require reporting spills of this material that could reach any surface waters. Report spills to local authorities and/or the National Response Center at (800) 424-8802 as appropriate or required.

7. HANDLING AND STORAGE

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL. REFER TO PRODUCT LABEL OR MANUFACTURERS TECHNICAL BULLETINS FOR THE PROPER USE AND HANDLING OF THIS MATERIAL.

Precautionary Measures: Liquid evaporates and forms vapor (fumes) that 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 85°F. Avoid contact with eyes, skin and clothing. Discard contaminated clothing and shoes or thoroughly clean before reuse.

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' (liquids, powders and dusts), and/or the American Petroleum Institute (API) Recommended Practice 2003, 'Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents' (liquids).

General Storage Information: 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. **DO NOT USE OR STORE** near heat, sparks or open flames. **USE AND STORE ONLY IN WELL VENTILATED AREA.** Keep container closed when not in use.

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

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 in a well-ventilated area.

PERSONAL PROTECTIVE EQUIPMENT:

Eye/Face Protection: Wear eye protection such as safety glasses, chemical goggles, or faceshields if engineering controls or work practices are not adequate to prevent eye contact.

Skin Protection: Wear impervious protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Users should determine acceptable performance characteristics of protective clothing. Consider physical requirements and other substances present when selecting protective clothing. Suggested materials for protective gloves include: Neoprene, or Viton.

Respiratory Protection: If exposure is anticipated to be greater than applicable exposure limits, wear a NIOSH approved respirator that provides adequate protection from measured concentrations of this material. Use the following elements for air-purifying respirators. Air-Purifying Respirator for Organic Vapors 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.

Occupational Exposure Limits:

<u>Component</u>	<u>Limit</u>	<u>TWA</u>	<u>STEL</u>	<u>Ceiling / Peak</u>	<u>Notation</u>
C12-C14 ISOALKANES	ACGIH	Not Established	NA	NA	NA
C12-C14 ISOALKANES	CPCHEM	1200 mg/m ³	NA	NA	C9-C15 Aliphatics

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Colorless liquid at room temperature. Mild hydrocarbon odor.

pH: 7 Approximate

Flash Point: >79.4°C (>174.9°F) (Tag Closed Cup)

Vapor Pressure: 0.7 mmHg @ 37.8°C (100°F)

Vapor Density (Air=1): >3

Boiling Point: 217°C (422.6°F) - 246°C (474.8°F)

Solubility (in Water): Negligible

Viscosity: 2.6 cSt @ 38°C (100°F)

Percent Volatile: 100% volume

Specific Gravity: 0.78 @ 15.6°C (60°F)

Evaporation Rate: 0.01

10. STABILITY AND REACTIVITY

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

Conditions to Avoid: Not Applicable.

Incompatibility With Other Materials: May react with oxygen and strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

Hazardous Decomposition Products: Carbon Oxides.

Hazardous Polymerization: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

IMMEDIATE HEALTH EFFECTS:

Acute Oral Toxicity: LD50 / rat / >5.0 mg/l

Acute Dermal Toxicity: LD50 / rabbit / >2.0 g/kg

Acute Inhalation Toxicity: LC50 / rat / >5.3 mg/l

Eye Irritation: This material is not expected to be irritating to the eyes.

Skin Irritation: This material is not expected to be irritating to the skin.

ADDITIONAL TOXICOLOGY INFORMATION:

This product contains C12-C14 ISOALKANES:

Repeated Dose Toxicity: 4 wks/ rhesus monkey / Doses: 0, or 654 ppm / 6 hrs/day, 3 days/wk / NOAEL > 654 ppm

Genetic Toxicity: Ames test - negative; Mouse lymphoma assay - negative; Sister chromatid exchange in CHO cells-negative.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: This material is not expected to be harmful to aquatic organisms.

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 situation. Consult appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

Shipping Descriptions per regulatory authority.

US DOT

UN3295, HYDROCARBONS, LIQUID, N.O.S., Combustible Liquid, III

ICAO / IATA

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

IMO / IMDG

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

RID / ADR

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION

15. REGULATORY INFORMATION

SARA 311/312 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 = CA Prop 65	17 = FDA 178	33 = RCRA Waste Appendix VIII
02 = LA RTK	18 = FDA 179	34 = RCRA Waste D-List
03 = MA RTK	19 = FDA 180	35 = RCRA Waste P-List
04 = MN Hazardous Substance	20 = FDA 181	36 = RCRA Waste U-List
05 = NJ RTK	21 = FDA 182	37 = SARA Section 302
06 = PA RTK	22 = FDA 184	38 = SARA Section 313
07 = CAA Section 112 HAPs	23 = FDA 186	39 = TSCA 12 (b)
08 = CWA Section 307	24 = FDA 189	40 = TSCA Section 4
09 = CWA Section 311	25 = IARC Group 1	41 = TSCA Section 5(a)
10 = DOT Marine Pollutant	26 = IARC Group 2A	42 = TSCA Section 8(a) CAIR
11 = FDA 172	27 = IARC Group 2B	43 = TSCA Section 8(a) PAIR
12 = FDA 173	28 = IARC Group 3	44 = TSCA Section 8(d)
13 = FDA 174	29 = IARC Group 4	45 = WHIMS - IDL
14 = FDA 175	30 = NTP Carcinogen	46 = Germany D TAL
15 = FDA 176	31 = OSHA Carcinogen	47 = Germany WKG
16 = FDA 177	32 = OSHA Highly Hazardous	48 = DEA List 1
		49 = DEA List 2

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

C12-C14 ISOALKANES

WHMIS CLASSIFICATION:

Class B, Division 3: Combustible Liquids

CHEMICAL INVENTORY LISTINGS:

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 Domestic Substances List (DSL) or are exempt from notification.

PEOPLE'S REPUBLIC OF CHINA: All the components of this product are listed on the 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: All the components of this product are on the Existing & New Chemical Substances (ENCS) inventory in Japan, or have an exemption from listing.

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

PHILIPPINES: This material contains components that require notification before sale or importation into the Philippines.

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

EU RISK AND SAFETY PHRASES:

R65: Harmful: may cause lung damage if swallowed.

R67: Vapors may cause drowsiness and dizziness.

R66: Repeated exposure may cause skin dryness or cracking.

S2: Keep out of the reach of children.

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

16. OTHER INFORMATION

NFPA RATINGS: Health = 1 Flammability = 1 Reactivity = 0 Special = NA

(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).

ABBREVIATIONS THAT MAY HAVE BEEN USED IN THIS DOCUMENT:

TLV - Threshold Limit Value

STEL - Short-term Exposure Limit

ACGIH - American Conference of Government Industrial Hygienists

NIOSH - National Institute for Occupational Safety & Health

WHMIS - Workplace Hazardous Materials Information System

EINECS - European Inventory of existing Commercial
Chemical Substances

SARA - Superfund Amendments and Reauthorization Act

EC50 - Effective Concentration

LD50 - Lethal Dose

NDA - No Data Available

<= - Less Than or Equal To

CNS - Central Nervous System

TWA - Time Weighted Average

PEL - Permissible Exposure Limit

OSHA - Occupational Safety & Health Administration

NFPA - National Fire Protection Agency

IARC - Intl. Agency for Research on Cancer

RCRA - Resource Conservation Recovery Act

TSCA - Toxic Substance Control Act

LC50 - Lethal Concentration

CAS - Chemical Abstract Service

N/A = Not applicable

>= - Greater Than or Equal To

MAK - Germany Maximum Concentration Values

This data sheet is prepared according to the latest adaptation of the EEC Guideline 67/548.

This data sheet is prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200).

This data sheet is prepared according to the ANSI SDS Standard (Z400.1).

This data sheet was prepared by EHS Product Stewardship Group, Chevron Phillips Chemical Company LP, 10001 Six Pines Drive, The Woodlands, TX 77380.

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.