Material Safety Data Sheet

HC-DCF HIGH FLASH™ DRY CLEANING SOLVENT

November 15, 2001
MSDS #: 711230
Revision#: 3

CHEVRON PHILLIPS CHEMICAL COMPANY LP
1301 McKinney Street
Houston, Texas 77010-3030

PHONE NUMBERS
EMERGENCY: (800) 231-0623 or
(510) 231-0623 (International)
EMERGENCY RESPONSE (ASIA): 800-AlertSGS
or 800-25378477 or 65-542-9595
TRANSPORTATION (24 HR): CHEMTREC
(800)424-9300 OR (703)527-3887
Technical Services: (800) 852-5531
For Additional MSDSs: (800) 852-5530

A. Product Identification

Synonyms: Not Established
Chemical Name: C10-C13 Isoparaffins
Chemical Family: Aliphatic hydrocarbon
Chemical Formula: Mixture
CAS Reg. No.: 68551-17-7
Product No.: Not Established

Product and/or Components Entered on EPA's TSCA Inventory: YES

This product is in U.S. commerce, and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals; hence, it may be subject to applicable TSCA provisions and restrictions.

B. Components

Ingredients	CAS Number	% By Wt.	OSHA PEL	ACGIH TLV
C10-C13 Isoparaffins	68551-17-7	100	NE	NE

See Section F, Recommended Exposure Limits.

C. Personal Protection Information

Ventilation: Use adequate ventilation to control concentration

below recommended exposure limits.

Respiratory Protection: Not generally required. For concentrations exceeding the recommended exposure limit, use NIOSH approved air purifying respirator.

Eye Protection: Use safety glasses with side shields. For splash protection, use chemical goggles and face shield.

Skin Protection: Avoid unnecessary skin contamination with material. Use gloves resistant to the material being used. (eg. neoprene or Viton).

NOTE: Personal protection information shown in Section C is based upon general information as to normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the expert assistance of an industrial hygienist or other qualified professional be sought.

D. Handling and Storage Precautions

Do not swallow, may be aspirated into lungs. Avoid contact with eyes, skin or clothing. Avoid breathing vapors, mist, fume or dust. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Wash thoroughly after handling. Launder contaminated clothing before reuse. Use with adequate ventilation.

Keep away from heat, sparks and flame. Keep out of water sources and sewers. Store in well-ventilated area. Store in closed container. Bond and ground during transfer.

E. Reactivity Data

Stability: Stable
Conditions to Avoid: Not Applicable
Incompatibility (Materials to Avoid): Oxygen and strong oxidizing agents

Hazardous Polymerization: Will Not Occur
Conditions to Avoid: Not Applicable
Hazardous Decomposition Products: Carbon oxides formed when burned.

F. Health Hazard Data

Recommended Exposure Limits:

The Company recommends a permissible exposure level (8-hr TWA) of 300 ppm as Total petroleum hydrocarbon.

Acute Effects of Overexposure:

Eye: May be mildly irritating.

Skin: May be mildly irritating. Dermal LD50 for this product is 15.4 g/kg (rabbit).

Inhalation: Animals displayed general weakness, ataxia, rapid respiration, nausea and tremors after a 4 hour exposure to 1308 ppm. The inhalation LC50 for this product in rats after a six hour exposure period and a fourteen day post exposure observation period was greater than 1277 ppm.

Ingestion: May irritate the stomach and intestines. The oral LD50 for this product in rats is greater than 34.6 g/kg. If swallowed, may be aspirated resulting in inflammation and possible fluid accumulation in the lungs.

Subchronic and Chronic Effects of Overexposure:

Some isoparaffins have produced kidney damage in male rats only. No comparable kidney disease is known to occur in humans.

Monkeys sustaining subacute exposures to airborne concentrations of 654 ppm of this product, six hours/day, three days/week for 13 total exposures showed no significant treatment-related effects.

Other Health Effects:

A similar material was evaluated for developmental toxicity in rats. They were neither embryotoxic nor teratogenic. This material was consistently negative in standard genotoxicity assays (does not interact with genetic material, DNA).

A Toxicity Study Summary for a similar product, is available upon request.

Health Hazard Categories:

	Animal	Human		Animal	Human
Known Carcinogen	___	___	Toxic	___	___
Suspect Carcinogen	___	___	Corrosive	___	___
Mutagen	___	___	Irritant	___	___
Teratogen	___	___	Target Organ Toxin	_X_	_X_
Allergic Sensitizer	___	___	Specify - Lung-Aspiration Hazard		
Highly Toxic	___	___			

First Aid and Emergency Procedures:

Eye: Flush eyes with running water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.

Skin: Wash skin with soap and water for at least fifteen minutes. If irritation or adverse symptoms develop, seek medical attention.

Inhalation: Remove from exposure. If breathing is difficult, give oxygen. If breathing ceases, administer artificial respiration followed by oxygen. Seek immediate medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

Note to Physician: Gastric lavage using a cuffed endotracheal tube may be performed at your discretion.

G. Physical Data

Appearance:	Colorless liquid
Odor:	Odorless
Boiling Point:	357-408F (181-209C)
Vapor Pressure:	1.5 mm Hg @ 100F (38C)
Vapor Density (Air = 1):	> 1
Solubility in Water:	Negligible
Specific Gravity (H_2O = 1):	0.762 @ 60/60F (15.6/15.6C)
Percent Volatile by Volume:	100
Evaporation Rate (Butyl Acetate = 1):	< 1
Viscosity:	1.55 cSt @ 100F (38C)

H. Fire and Explosion Data

Flash Point (Method Used):	142F (61.6C) (TCC, ASTM D56) 144F (62.2C) (PMCC, ASTM D93)
Flammable Limits (% by Volume in Air):	LEL - 1.1% (estimated) UEL - 6.0% (estimated)
Fire Extinguishing Media:	Dry chemical, foam or carbon dioxide (CO_2)
Special Fire Fighting Procedures:	Evacuate area of all unnecessary personnel. Use NIOSH approved self-contained breathing apparatus and other protective equipment and/or garments described in Section C if exposure conditions warrant. Shut off source if possible. Water fog or spray may be used to cool exposed containers and equipment. Do not spray water directly on fire - product will float and could be reignited on surface of water.
Fire and Explosion Hazards:	Carbon oxides formed when burned. Highly flammable vapors which are heavier than air may accumulate in low areas and/or spread along ground away from handling site. Flash back along vapor trail is possible.

I. Spill, Leak and Disposal Procedures

Precautions Required if Material is Released or Spilled:
Evacuate area of all unnecessary personnel. Wear protective equipment and/or garments described in Section C if exposure conditions warrant. Shut off source, if possible and contain spill. Protect from ignition. Keep out of water sources and sewers. Absorb in a dry, inert material (sand, clay, etc). Transfer to disposal drums using non-sparking equipment.

Waste Disposal (Insure Conformity with all Applicable Disposal Regulations):
Incinerate or place in permitted waste management facility.

J. DOT Transportation

Shipping Name: Hydrocarbons liquid, n.o.s.
Hazard Class: Combustible liquid
ID Number: UN3295
Packing Group: III
Marking: N/A
Label: None
Placard: Combustible/3295
Hazardous Substance/RQ: Not Applicable
Shipping Description: Hydrocarbons, liquid, n.o.s., Combustible liquid, UN3295, III
Packaging References: 49 CFR 173.150, 173.203, 173.241

Note: This product has been reclassed, in accordance with 49 CFR 173.150(f), so the reference to Class 3 is modified to read "Combustible liquid" (49 CFR 172.101(d)(4)). This product is not regulated by DOT when shipped domestically, in non-bulk packaging.

K. RCRA Classification - Unadulterated Product as a Waste

Prior to disposal, consult your Environmental contact to determine if TCLP (Toxicity Characteristic Leaching Procedure, EPA Test Method 1311) is required. Reference 40 CFR Part 261.

L. Protection Required for Work on Contaminated Equipment

Contact immediate supervisor for specific instructions before work is initiated. Wear protective equipment and/or garments described in Section C if exposure conditions warrant.

M. Hazard Classification

_X_ This product meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

_X_ Combustible Liquid	___ Flammable Aerosol	___ Oxidizer
___ Compressed Gas	___ Explosive	___ Pyrophoric
___ Flammable Gas	_X_ Health Hazard (Section F)	___ Unstable
___ Flammable Liquid	___ Organic Peroxide	___ Water Reactive

___ Flammable Solid

___ Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

N. Additional Comments

REVISION STATEMENT:
This revision updates Section H.

SARA 313

As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

NFPA 704 Hazard Codes		Signals
		Least - 0
Health	: 0	Slight - 1
Flammability	: 2	Moderate - 2
Reactivity	: 0	High - 3
Special Haz.	: -	Extreme - 4