

Version 1.1 Revision Date 2015-08-27

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product information

Product Name : Orfom® MC 63 Collector

Material : 1117143, 1117142, 1117141, 1117140

Company : Chevron Phillips Chemical Company LP

10001 Six Pines Drive The Woodlands, TX 77380

Emergency telephone:

Health:

866.442.9628 (North America) 1.832.813.4984 (International)

Transport:

North America: CHEMTREC 800.424.9300 or 703.527.3887 Asia: +800 CHEMCALL (+800 2436 2255) China:+86-21-22157316 EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group

E-mail address : SDS@CPChem.com Website : www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture

This product has been classified in accordance with the hazard communication standard 29 CFR 1910.1200; the SDS and labels contain all the information as required by the standard.

Emergency Overview

Danger

Form: Liquid Physical state: Liquid

OSHA Hazards : Combustible Liquid, Moderate eye irritant, Sensitizer, Aspiration

hazard

Classification

Flammable liquids , Category 4
 Eye irritation , Category 2B
 Skin sensitization , Category 1
 Aspiration hazard , Category 1

MSDS Number:100000002716 1/14

Version 1.1 Revision Date 2015-08-27

Labeling

Symbol(s) :





Signal Word : Danger

Hazard Statements : H227: Combustible liquid.

H304: May be fatal if swallowed and enters airways.

H317: May cause an allergic skin reaction.

H320: Causes eye irritation.

Precautionary Statements : Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces.

- No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash skin thoroughly after handling.

P272 Contaminated work clothing must not be allowed out of

the workplace.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER or doctor/ physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and

water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. P331 Do NOT induce vomiting.

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam for extinction.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Carcinogenicity:

IARC No ingredient of this product present at levels greater than or

equal to 0.1% is identified as probable, possible or confirmed

human carcinogen by IARC.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

ACGIH No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcinogen

by ACGIH.

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

SECTION 3: Composition/information on ingredients

Synonyms : 50/50 Soltrol 130/Dipentene-di-mercaptan

Component	CAS-No.	Weight %
Dipentene Dimercaptan	4802-20-4	30 - 70
C12-C14 Isoalkanes	68551-19-9	30 - 70

SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data

sheet to the doctor in attendance. Material may produce a serious, potentially fatal pneumonia if swallowed or vomited.

If inhaled : If unconscious place in recovery position and seek medical

advice. If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water. If on clothes, remove clothes.

In case of eye contact : Immediately flush eye(s) with plenty of water. Remove contact

lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear. Never give anything by mouth to

an unconscious person. If symptoms persist, call a physician.

Take victim immediately to hospital.

SECTION 5: Firefighting measures

Flash point : 67.8 °C (154.0 °F)

Method: ASTM D 93

Suitable extinguishing

media

: Carbon dioxide (CO2).

Unsuitable extinguishing

media

: High volume water jet.

Special protective

equipment for fire-fighters

: Wear self-contained breathing apparatus for firefighting if

necessary.

Further information : For safety reasons in case of fire, cans should be stored

separately in closed containments. Use a water spray to cool

fully closed containers.

Fire and explosion

protection

: Do not spray on an open flame or any other incandescent material. Keep away from open flames, hot surfaces and

sources of ignition.

SECTION 6: Accidental release measures

MSDS Number:100000002716 3/14

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

Personal precautions : Use personal protective equipment. Ensure adequate

ventilation.

Environmental precautions : Prevent product from entering drains. Prevent further leakage

or spillage if safe to do so. If the product contaminates rivers

and lakes or drains inform respective authorities.

Methods for cleaning up : Contain spillage, and then collect with non-combustible

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable,

closed containers for disposal.

SECTION 7: Handling and storage

Handling

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapors/dust. Avoid

contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance

with local and national regulations.

Advice on protection against fire and explosion

Do not spray on an open flame or any other incandescent material. Keep away from open flames, hot surfaces and

sources of ignition.

Storage

Requirements for storage areas and containers

No smoking. Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the

Control parameters

Note

technological safety standards.

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

Chevron Phillips Chemical Company LP

Ingredients	Basis	Value	Control parameters	Note
C12-C14 Isoalkanes	Manufacturer	TWA	1,200 mg/m3	RCP,

Value

RCP Reciprocal Calculation Procedure

Engineering measures

US Ingredients

Adequate ventilation to control airborned concentrations below the exposure guidelines/limits. Consider the potential hazards of this material (see Section 2), 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.

Personal protective equipment

MSDS Number:100000002716 4/14

Basis

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

Respiratory protection : Wear a supplied-air NIOSH approved respirator unless

ventilation or other engineering controls are adequate to maintain minimal oxygen content of 19.5% by volume under normal atmospheric pressure. Wear a NIOSH approved respirator that provides protection when working with this material if exposure to harmful levels of airborne material may occur, such as:. Use a positive pressure, air-supplying

respirator if there is potential for uncontrolled release, exposure levels are not known, or other circumstances where airpurifying respirators may not provide adequate protection.

Hand protection : The suitability for a specific workplace should be discussed

with the producers of the protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.

Skin and body protection : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to the specific work-place. Wear as appropriate:. Flame retardant protective clothing. Footwear protecting against chemicals.

Hygiene measures : When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Form : Liquid Physical state : Liquid

Safety data

Flash point : 67.8 °C (154.0 °F)

Method: ASTM D 93

Boiling point/boiling range : 187 - 228.8 °C (369 - 443.8 °F)

Method: ASTM D 86

Density : 878 kg/m3

Method: ASTMD 4052

Bulk density : 7.32 L/G

Relative vapor density : No data available

SECTION 10: Stability and reactivity

MSDS Number:100000002716 5/14

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

Chemical stability : This material is considered stable under normal ambient and

anticipated storage and handling conditions of temperature

and pressure.

Possibility of hazardous reactions

Conditions to avoid : Heat, flames and sparks.

Other data : No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

Orfom® MC 63 Collector

Acute oral toxicity : Acute toxicity estimate: 4,120 mg/kg

Method: Calculation method

Acute toxicity estimate: 4,120 mg/kg

Method: Calculation method

Acute inhalation toxicity

C12-C14 Isoalkanes : LC50: > 5.3milligram per literExposure time: 4 h

Species: Rat

Test atmosphere: vapor

Method: OECD Test Guideline 403

Information given is based on data obtained from similar

substances.

Orfom® MC 63 Collector

Skin irritation

: May cause skin irritation in susceptible persons.

Orfom® MC 63 Collector

Eye irritation

: Vapors may cause irritation to the eyes, respiratory system

and the skin.

Sensitization

Dipentene Dimercaptan : The product is a skin sensitizer, sub-category 1B.

Information given is based on data obtained from similar

substances.

C12-C14 Isoalkanes Classification: Did not cause sensitization on laboratory

animals.

Information given is based on data obtained from similar

6/14

substances.

Repeated dose toxicity

C12-C14 Isoalkanes : Species: Monkey

Application Route: Inhalation

Dose: 0, 654 ppm Exposure time: 4 wk

Number of exposures: 6 h/d, 3 d/wk

NOEL: > 654 ppm

Method: OECD Test Guideline 412

Version 1.1 Revision Date 2015-08-27

Species: Rat, male and female

Sex: male and female

Application Route: oral gavage Dose: 0, 25, 150, 1000 mg/kg/d

Exposure time: 4 wk
Number of exposures: daily
NOEL: >= 1000 mg/kg/d
Method: OECD Guideline 422

Information given is based on data obtained from similar

substances.

Reproductive toxicity

C12-C14 Isoalkanes : Species: Rat Sex: male

Application Route: oral gavage Dose: 0, 750, 1500, 3000 mg/kg/bw/d

Number of exposures: daily

Test period: 90 d

Method: OECD Test Guideline 415 NOAEL Parent: >= 3000 mg/kg/bw/d

Information given is based on data obtained from similar

substances.

Species: Rat Sex: female

Application Route: oral gavage Dose: 0, 750, 1500 mg/kg/bw/d Number of exposures: daily

Test period: 90 d

Method: OECD Test Guideline 415 NOAEL Parent: >= 1500 mg/kg/bw/d

NOAEL F1: 750 mg/kg/bw/d

Information given is based on data obtained from similar

substances.

Species: Rat

Sex: male and female

Application Route: inhalation (vapor)

Dose: 100, 300 ppm

Number of exposures: 6 h/d/5d/wk

Test period: 8 wk

Method: OECD Guideline 421 NOAEL Parent: >= 300 ppm NOAEL F1: >= 300 ppm

Information given is based on data obtained from similar

substances.

Developmental Toxicity

C12-C14 Isoalkanes : Species: Rat

Application Route: Inhalation

Dose: 100, 300 ppm Exposure time: GD 6-15 Number of exposures: 6 h/d

NOAEL Teratogenicity: >= 300 ppm

Information given is based on data obtained from similar

substances.

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

Species: Rat

Application Route: Inhalation
Dose: 300, 900 ppm
Exposure time: GD 6-15
Number of exposures: 6 h/d
Method: OECD Guideline 414
NOAEL Teratogenicity: >= 900 ppm
NOAEL Maternal: >= 900 ppm

Information given is based on data obtained from similar

substances.

Species: Rat

Application Route: oral gavage Dose: 0, 500, 1000, 1500 mg/kg/d

Exposure time: GD 6-15 Number of exposures: Daily Method: OECD Guideline 414 NOAEL Teratogenicity: 1,000 mg/kg NOAEL Maternal: 500 mg/kg

Information given is based on data obtained from similar

substances.

Orfom® MC 63 Collector

Aspiration toxicity : May be fatal if swallowed and enters airways.

CMR effects

C12-C14 Isoalkanes : Carcinogenicity: Limited evidence of carcinogenicity in animal

studies

Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects., In vivo tests did not show

mutagenic effects

Teratogenicity: Animal testing did not show any effects on

fetal development.

Reproductive toxicity: No adverse effects expected

Orfom® MC 63 Collector

Further information : Solvents may degrease the skin.

SECTION 12: Ecological information

Toxicity to fish

Dipentene Dimercaptan : LC50: 0.099 mg/l

Exposure time: 96 h

Species: Fish

Method: QSAR modeled data

Exposure time: 96 h

Species: Oncorhynchus mykiss (rainbow trout) semi-static test Method: OECD Test Guideline 203 Information given is based on data obtained from similar

substances.

Toxicity to daphnia and other aquatic invertebrates

MSDS Number:100000002716 8/14

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

Dipentene Dimercaptan : EC50: 0.074 mg/l

Exposure time: 48 h Species: Daphnia

Method: QSAR modeled data

C12-C14 Isoalkanes EL50: > 1,000 mg/l

Exposure time: 48 h

Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202

Information given is based on data obtained from similar

substances.

Toxicity to algae

Dipentene Dimercaptan : EC50: 0.064 mg/l

Exposure time: 72 h

Method: QSAR modeled data

C12-C14 Isoalkanes EL50: > 1,000 mg/l

Exposure time: 72 h

Species: Pseudokirchneriella subcapitata (green algae) Growth inhibition Method: OECD Test Guideline 201 Information given is based on data obtained from similar

substances.

M-Factor

beta,4-dimethyl-3-

: 10

mercaptocyclohexaneethylthi

ol

Toxicity to fish (Chronic toxicity)

C12-C14 Isoalkanes : NOELR: 0.316 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Method: QSAR modeled data

Biodegradability

Dipentene Dimercaptan : This material is not expected to be readily biodegradable.

Information given is based on data obtained from similar

substances.

C12-C14 Isoalkanes : aerobic

31 %

Testing period: 28 d

Method: OECD Test Guideline 301F

Information given is based on data obtained from similar

substances.

Expected to be inherently biodegradable.

Ecotoxicology Assessment

Acute aquatic toxicity

Dipentene Dimercaptan : Very toxic to aquatic life.

MSDS Number:100000002716 9/14

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

Chronic aquatic toxicity

Dipentene Dimercaptan : Very toxic to aquatic life with long lasting effects.

Results of PBT assessment

C12-C14 Isoalkanes : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological

information

: Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this SDS pertains only to the product as shipped.

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.

Product : Do not dispose of waste into sewer. Do not contaminate

ponds, waterways or ditches with chemical or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product.

Do not re-use empty containers. Do not burn, or use a cutting

torch on, the empty drum.

SECTION 14: Transport information

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments in non-bulk packages (see regulatory definition).

Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the SDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

NA1993, COMBUSTIBLE LIQUID, N.O.S., (DIPENTENE DIMERCAPTAN, C12-C14 ISOALKANES), III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIPENTENE DIMERCAPTAN, C12-C14 ISOALKANES), 9, III, (67.8 °C), MARINE POLLUTANT, (DIPENTENE DIMERCAPTAN)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIPENTENE DIMERCAPTAN, C12-C14 ISOALKANES), 9, III

MSDS Number:100000002716 10/14

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

ADR (AGREEMENT ON DANGEROUS GOODS BY ROAD (EUROPE))

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIPENTENE DIMERCAPTAN, C12-C14 ISOALKANES), 9, III, (E)

RID (REGULATIONS CONCERNING THE INTERNATIONAL TRANSPORT OF DANGEROUS GOODS (EUROPE))

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIPENTENE DIMERCAPTAN, C12-C14 ISOALKANES), 9, III

ADN (EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY INLAND WATERWAYS)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DIPENTENE DIMERCAPTAN, C12-C14 ISOALKANES), 9, III

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

National	legislation
Hational	icgisiation

SARA 311/312 Hazards : Fire Hazard

Acute Health Hazard

CERCLA Reportable

Quantity

: This material does not contain any components with a CERCLA

RΩ

SARA 302 Reportable

Quantity

: This material does not contain any components with a SARA

302 RQ.

SARA 302 Threshold

Planning Quantity

: No chemicals in this material are subject to the reporting

requirements of SARA Title III. Section 302.

SARA 304 Reportable

Quantity

: This material does not contain any components with a section

304 EHS RQ.

SARA 313 Ingredients : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

MSDS Number:100000002716 11/14

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

Ozone-Depletion Potential

: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

US State Regulations

Pennsylvania Right To Know

: No components are subject to the Pennsylvania Right to Know

Act.

New Jersey Right To Know

: No components are subject to the New Jersey Right to Know

Act.

California Prop. 65

Ingredients

: This product does not contain any chemicals known to the State

of California to cause cancer, birth, or any other reproductive

defects.

Notification status

Europe REACH : This mixture contains only ingredients which have been

subject to a pre-registration according to Regulation

(EU) No. 1907/2006 (REACH).

United States of America TSCA : On TSCA Inventory

Canada DSL : All components of this product are on the Canadian

DSL.

Australia AICS : On the inventory, or in compliance with the inventory New Zealand NZIoC : On the inventory, or in compliance with the inventory Japan ENCS : On the inventory, or in compliance with the inventory Korea KECI : On the inventory, or in compliance with the inventory

Philippines PICCS : Not in compliance with the inventory

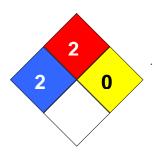
China IECSC : On the inventory, or in compliance with the inventory

Version 1.1 Revision Date 2015-08-27

SECTION 16: Other information

NFPA Classification : Health Hazard: 2

Fire Hazard: 2 Reactivity Hazard: 0



Further information

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this SDS pertains only to the product as shipped.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing Chemical Substances	PICCS	Philippines Inventory of Commercial Chemical Substances
MAK	Germany Maximum Concentration Values	PRNT	Presumed Not Toxic
GHS	Globally Harmonized System	RCRA	Resource Conservation Recovery Act
>=	Greater Than or Equal To	STEL	Short-term Exposure Limit
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act.
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
IECSC	Inventory of Existing Chemical Substances in China	TWA	Time Weighted Average
ENCS	Japan, Inventory of Existing and New Chemical Substances	TSCA	Toxic Substance Control Act

MSDS Number:100000002716 13/14

Orfom® MC 63 Collector

Version 1.1 Revision Date 2015-08-27

KECI	Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composition, Complex Reaction Products, and Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials Information System
LC50	Lethal Concentration 50%		

MSDS Number:100000002716 14/14