

**Orfom® MC47 Collector**

Version 3.4

Revision Date 2016-05-06

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

Product Name : Orfom® MC47 Collector
Material : 1115719, 1111049, 1111048, 1111047

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:

CHEMTREC 800.424.9300 or 703.527.3887(int'l)
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, Carcinogen, Skin sensitizer, Aspiration hazard, Irritant

Classification

: Flammable liquids , Category 4
Skin irritation , Category 2
Eye irritation , Category 2A

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Skin sensitization , Category 1
 Carcinogenicity , Category 2
 Aspiration hazard , Category 1

Labeling

Symbol(s)



Signal Word

: Danger

Hazard Statements

: H227: Combustible liquid.
 H304: May be fatal if swallowed and enters airways.
 H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H319: Causes serious eye irritation.
 H351: Suspected of causing cancer.

Precautionary Statements

: **Prevention:**

P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 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.
 P281 Use personal protective equipment as required.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 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.
 P308 + P313 IF exposed or concerned: Get medical advice/attention.
 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.
 P362 Take off contaminated clothing and wash 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.

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Carcinogenicity:**IARC**

Group 2B: Possibly carcinogenic to humans

Naphthalene 91-20-3

Ethylbenzene 100-41-4

NTP

Reasonably anticipated to be a human carcinogen

Naphthalene 91-20-3

ACGIH

Confirmed animal carcinogen with unknown relevance to humans

Distillates (petroleum), 64742-47-8

Hydrotreated light

SECTION 3: Composition/information on ingredients

Molecular formula : Mixture

Component	CAS-No.	Weight %
tert-Dodecanethiol	25103-58-6	20 - 80
Distillates (petroleum), Hydrotreated light	64742-47-8	20 - 80
Naphthalene	91-20-3	0.1 - 0.4
Benzene, dimethyl-	1330-20-7	0.1 - 0.4
Ethylbenzene	100-41-4	0.1 - 0.4

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 : Consult a physician after significant exposure. If unconscious place in recovery position and seek medical advice.
- In case of skin contact : If skin irritation persists, call a physician. 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 : 81 °C (178 °F)
- Suitable extinguishing media : Carbon dioxide (CO₂).
- Unsuitable extinguishing : High volume water jet.

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media

Specific hazards during fire fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. 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

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 exposure - obtain special instructions before use. 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. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

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 : No smoking. Keep container tightly closed in a dry and well-

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areas and containers

ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the 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
tert-Dodecanethiol	Manufacturer	TWA	0.1 ppm,	

US

Ingredients	Basis	Value	Control parameters	Note
Distillates (petroleum), Hydrotreated light	OSHA Z-1	TWA	500 ppm, 2,000 mg/m3	(b),
	OSHA Z-1-A	TWA	400 ppm, 1,600 mg/m3	
	ACGIH	TWA	200 mg/m3	CNS impair, URT irr, skin irr, P, A3, Skin, varies,
Naphthalene	ACGIH	TWA	10 ppm,	hematologic eff, URT irr, eye irr, eye dam, (), A4, Skin,
	ACGIH	STEL	15 ppm,	hematologic eff, URT irr, eye irr, eye dam, (), A4, Skin,
	OSHA Z-1	TWA	10 ppm, 50 mg/m3	(b),
	OSHA Z-1-A	TWA	10 ppm, 50 mg/m3	
	OSHA Z-1-A	STEL	15 ppm, 75 mg/m3	
Ethylbenzene	OSHA Z-1	TWA	100 ppm, 435 mg/m3	(b),
	OSHA Z-1-A	TWA	100 ppm, 435 mg/m3	
	OSHA Z-1-A	STEL	125 ppm, 545 mg/m3	
	ACGIH	TWA	20 ppm,	

- (i) Adopted values or notations enclosed are those for which changes are proposed in the NIC
 (b) The value in mg/m3 is approximate.
 A3 Confirmed animal carcinogen with unknown relevance to humans
 A4 Not classifiable as a human carcinogen
 CNS impair Central Nervous System impairment
 eye dam Eye damage
 eye irr Eye irritation
 hematologic eff Hematologic effects
 P Application restricted to conditions in which there are negligible aerosol exposures
 Skin Danger of cutaneous absorption
 skin irr Skin irritation
 URT irr Upper Respiratory Tract irritation
 varies varies

Immediately Dangerous to Life or Health Concentrations (IDLH)

Substance name	CAS-No.	Control parameters	Update
Naphthalene	91-20-3	Immediately Dangerous to Life or Health Concentration Value 250 ppm	1995-03-01
Benzene, dimethyl-	1330-20-7	Immediately Dangerous to Life or Health Concentration Value 900 ppm	1995-03-01
Ethylbenzene	100-41-4	Immediately Dangerous to Life or Health Concentration Value 800 ppm	1995-03-01

Engineering measures

Adequate ventilation to control airborne 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.

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Personal protective equipment

- 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:. 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.
- 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. Suggested materials for protective gloves include:. Viton.
- Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles.
- Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear as appropriate:. Flame-resistant 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 : 81 °C (178 °F)
- Thermal decomposition : No data available
- Molecular formula : Mixture
- Density : 0.83 G/ML
at 25 °C (77 °F)
- Viscosity, kinematic : 2.46 cSt
at 25 °C (77 °F)

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1.40 cSt
at 60 °C (140 °F)

SECTION 10: Stability and reactivity

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.

Thermal decomposition : No data available

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

SECTION 11: Toxicological information

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Acute oral toxicity : LD50: > 5,000 mg/kg
Method: Calculation method

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Acute inhalation toxicity : : > 5 mg/l
Exposure time: 4 h
Method: Calculation method

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Acute dermal toxicity : LD50: > 2,000 mg/kg
Method: Calculation method

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Skin irritation : May cause skin irritation and/or dermatitis.

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Eye irritation : May cause irreversible eye damage.

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Sensitization : Causes sensitization.

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Repeated dose toxicity : Method: Estimated based on individual component values.
No adverse effects expected

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Carcinogenicity : Method: Expected to be carcinogenic based on individual component data.

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Reproductive toxicity

tert-Dodecanethiol : Species: Rat
Sex: male
Application Route: oral gavage
Dose: 10, 50, 250 mg/kg/d
Exposure time: 35 d
Number of exposures: Daily
Method: OECD Guideline 422
NOAEL Parent: \geq 250 mg/kg
Information given is based on data obtained from similar substances.

Species: Rat
Sex: female
Application Route: oral gavage
Dose: 10, 50, 250 mg/kg/d
Exposure time: 53 d
Number of exposures: Daily
Method: OECD Guideline 422
NOAEL Parent: 50 mg/kg
NOAEL F1: 50 mg/kg
Information given is based on data obtained from similar substances.
Decrease in Delivery Index

Developmental Toxicity

tert-Dodecanethiol : Species: Rat
Application Route: Inhalation
Dose: 0, 22.7, 88.6 ppm
Number of exposures: 6 hrs/d
Test period: GD 6-19
Method: OECD Guideline 414
NOAEL Teratogenicity: \geq 88.6 ppm
No adverse effects expected

Species: Mouse
Application Route: Inhalation
Dose: 0, 22.7, 88.6 ppm
Number of exposures: 6 hrs/d
Test period: GD 6-19
Method: OECD Guideline 414
NOAEL Teratogenicity: \geq 88.6 ppm
No adverse effects expected

Distillates (petroleum),
Hydrotreated light

Species: Rat
Application Route: Inhalation
Dose: 0, 106, 364 mg/l
Exposure time: 6h/d
Test period: GD 6 - 20
NOAEL Teratogenicity: \geq 364 mg/l
NOAEL Maternal: \geq 364 mg/l

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Species: Rat
 Application Route: oral gavage
 Dose: 500, 1000, 1500, 2000 mg/kg/d
 Exposure time: 10 d
 Test period: GD 6 - 15
 Method: OECD Guideline 414
 NOAEL Teratogenicity: 1,000 mg/kg
 NOAEL Maternal: 500 mg/kg

Naphthalene

Species: Rabbit
 Application Route: oral gavage
 Dose: 40, 200, 400 mg/kg
 Test period: 29 d, GD 6-18
 NOAEL Teratogenicity: 400 mg/kg

Benzene, dimethyl-

Species: Rat
 Application Route: Inhalation
 Dose: 0, 805, 1610 ppm
 Number of exposures: 6 h/d
 Test period: GD 7-16
 NOAEL Maternal: 1610 ppm

Species: Mouse
 Application Route: oral gavage
 Dose: 0, 780, 1960, 2619 mg/kg
 Number of exposures: 3 times/d
 Test period: GD 6-15
 NOAEL Teratogenicity: 780 mg/kg
 NOAEL Maternal: 780 mg/kg

Aspiration toxicity

tert-Dodecanethiol
 Distillates (petroleum),
 Hydrotreated light
 Benzene, dimethyl-
 Ethylbenzene

: May be harmful if swallowed and enters airways.
 May be fatal if swallowed and enters airways.

 May be fatal if swallowed and enters airways.
 May be fatal if swallowed and enters airways.

CMR effects

tert-Dodecanethiol

: Carcinogenicity: Not available
 Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
 Teratogenicity: Animal testing did not show any effects on fetal development.
 Reproductive toxicity: No toxicity to reproduction

Naphthalene

Carcinogenicity: Limited evidence of carcinogenicity in animal studies

Benzene, dimethyl-

Carcinogenicity: Not classifiable as a human carcinogen.
 Mutagenicity: Did not show mutagenic effects in animal experiments.
 Teratogenicity: Damage to fetus not classifiable

Ethylbenzene

Mutagenicity: In vivo tests did not show mutagenic effects
 Teratogenicity: Did not show teratogenic effects in animal experiments.
 Reproductive toxicity: No toxicity to reproduction

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Further information

: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

SECTION 12: Ecological information**Toxicity to fish**

tert-Dodecanethiol	: LL50: > 100 mg/l Exposure time: 96 h Species: Danio rerio (Zebra Fish) static test Method: OECD Test Guideline 203 No toxicity at the limit of solubility.
Distillates (petroleum), Hydrotreated light	NOEC: 2 mg/l Exposure time: 96 h Species: Salmo gairdneri (Rainbow trout) Method: OECD Test Guideline 203
Naphthalene	LC50: 3.2 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)
Benzene, dimethyl-	LC50: 8.2 mg/l Exposure time: 96 h Species: Salmo gairdneri (Rainbow trout)
Ethylbenzene	LC50: 4.3 mg/l Exposure time: 96 h Species: Marone saxatilis (striped bass)

Toxicity to daphnia and other aquatic invertebrates

tert-Dodecanethiol	: EC50: > 0.056 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) semi-static test Method: OECD Test Guideline 202 No toxicity at the limit of solubility.
Distillates (petroleum), Hydrotreated light	EL50: 1.4 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) static test Method: OECD Test Guideline 202
Naphthalene	LC50: 2.16 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea)
Ethylbenzene	LC50: 2.6 mg/l Exposure time: 96 h Species: Mysidopsis bahia (mysid shrimp)

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EC50: 2.2 mg/l
 Exposure time: 48 h
 Species: *Daphnia magna* (Water flea)
 Method: OECD Test Guideline 202

Toxicity to algae

Distillates (petroleum),
 Hydrotreated light : EL50: 1 - 3 mg/l
 Exposure time: 72 h
 Species: *Pseudokirchneriella subcapitata* (green algae)
 Method: OECD Test Guideline 201

Naphthalene EC50: 2.96 mg/l
 Exposure time: 48 h
 Species: *Selenastrum capricornutum* (algae)

Ethylbenzene ErC50: 5.0 mg/l
 Exposure time: 96 h
 Species: *Selenastrum capricornutum* (algae)

ErC50: 7.7 mg/l
 Exposure time: 72 h
 Species: *Skeletonema costatum* (Marine Algae)

Toxicity to bacteria

tert-Dodecanethiol : NOEC: 8.6 mg/l
 Exposure time: 3 h
 Growth rate
 Respiration inhibition
 Method: OECD Test Guideline 209

NOEC: > 10 mg/l
 Exposure time: 3 h
 Growth rate
 Respiration inhibition
 Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

tert-Dodecanethiol : NOEC: 0.0108 mg/l
 Exposure time: 21 d
 Species: *Daphnia magna* (Water flea)
 semi-static test
 Method: OECD Test Guideline 211
 No toxicity at the limit of solubility.

Distillates (petroleum),
 Hydrotreated light : NOEC: 0.48 mg/l
 Exposure time: 21 Days
 Species: *Daphnia magna* (Water flea)

Ethylbenzene : NOEC: 1 mg/l
 Exposure time: 7 d
 Species: *Daphnia pulex* (Water flea)
 semi-static test
 Analytical monitoring: yes

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Bioaccumulation

tert-Dodecanethiol : Species: Danio rerio (zebra fish)
 Exposure time: 15 d
 Bioconcentration factor (BCF): > 500 - < 1,950
 Method: OECD Test Guideline 305
 Biomagnification factor <1
 The product may be accumulated in organisms.

Benzene, dimethyl- : This material is not expected to bioaccumulate.

Biodegradability

tert-Dodecanethiol : Result: Not readily biodegradable.
 0 %
 Testing period: 28 d
 Method: OECD Test Guideline 301D

Distillates (petroleum),
 Hydrotreated light : This material is not expected to be readily biodegradable.
 Expected to be inherently biodegradable.
 Information given is based on data obtained from similar substances.

Benzene, dimethyl- : This material is expected to be readily biodegradable.

Ethylbenzene : This material is expected to be readily biodegradable.

Ecotoxicology Assessment

Acute aquatic toxicity
 tert-Dodecanethiol : No toxicity at the limit of solubility.

Distillates (petroleum),
 Hydrotreated light : Toxic to aquatic life.
 Naphthalene : Very toxic to aquatic life.

Benzene, dimethyl- : Toxic to aquatic life.

Ethylbenzene : Toxic to aquatic life.

Chronic aquatic toxicity
 tert-Dodecanethiol : May cause long lasting harmful effects to aquatic life.

Distillates (petroleum),
 Hydrotreated light : Toxic to aquatic life with long lasting effects.
 Naphthalene : Very toxic to aquatic life with long lasting effects.

Ethylbenzene : Harmful to aquatic life with long lasting effects.

Toxicity Data on Soil
 tert-Dodecanethiol : Adsorbs on soil.

Other organisms relevant to the environment

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tert-Dodecanethiol	: No information available.
Impact on Sewage Treatment tert-Dodecanethiol	: No information available.
Results of PBT assessment tert-Dodecanethiol	: Non-classified PBT substance, Non-classified vPvB substance
Ethylbenzene	: Non-classified vPvB substance, Non-classified PBT substance
Additional ecological information	: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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	: The product should not be allowed to enter drains, water courses or the soil. 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)

UN1268, PETROLEUM DISTILLATES, N.O.S., COMBUSTIBLE LIQUID, III

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DISTILLATES (PETROLEUM) HYDROTREATED LIGHT), 9, III, (81 °C), MARINE POLLUTANT, (DISTILLATES (PETROLEUM) HYDROTREATED LIGHT)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

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UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DISTILLATES (PETROLEUM) HYDROTREATED LIGHT), 9, III

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

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DISTILLATES (PETROLEUM) HYDROTREATED LIGHT), 9, III, (E)

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

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DISTILLATES (PETROLEUM) HYDROTREATED LIGHT), 9, III

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

UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (DISTILLATES (PETROLEUM) HYDROTREATED LIGHT), 9, III

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

SECTION 15: Regulatory information**National legislation**

SARA 311/312 Hazards : Fire Hazard
Acute Health Hazard
Chronic Health Hazard

EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO – KNOW

CERCLA Reportable Quantity : Calculated RQ exceeds reasonably attainable upper limit.
Naphthalene

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.

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SARA 313 Ingredients : The following components are subject to reporting levels established by SARA Title III, Section 313:

: Naphthalene - 91-20-3
Ethylbenzene - 100-41-4

Clean Air Act

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).

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):

: Naphthalene - 91-20-3
Benzene, dimethyl- - 1330-20-7
Ethylbenzene - 100-41-4

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).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMII Intermediate or Final VOC's (40 CFR 60.489):

: Benzene, dimethyl- - 1330-20-7
Ethylbenzene - 100-41-4

US State Regulations**Pennsylvania Right To Know**

: tert-Dodecanethiol - 25103-58-6
Distillates (petroleum), Hydrotreated light - 64742-47-8
Naphthalene - 91-20-3
Benzene, dimethyl- - 1330-20-7
Ethylbenzene - 100-41-4

New Jersey Right To Know

: tert-Dodecanethiol - 25103-58-6
Distillates (petroleum), Hydrotreated light - 64742-47-8
Naphthalene - 91-20-3
Ethylbenzene - 100-41-4

California Prop. 65 Ingredients

: WARNING! This product contains a chemical known in the State of California to cause cancer.

Notification status

Europe REACH : On the inventory, or in compliance with the inventory
United States of America TSCA : On TSCA Inventory
Canada DSL : All components of this product are on the Canadian DSL

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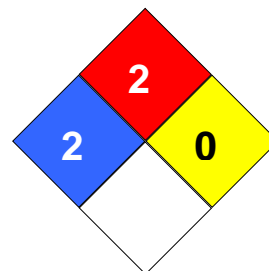
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Australia AICS	:	On the inventory, or in compliance with the inventory
New Zealand NZIoC	:	On the inventory, or in compliance with the inventory
Japan ENCS	:	On the inventory, or in compliance with the inventory
Korea KECI	:	On the inventory, or in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

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

Orfom® MC47 Collector

Version 3.4

Revision Date 2016-05-06

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
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%		