

mPAO Filtration Waste

Version 1.1

Revision Date 2012-12-03

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

Trade name : mPAO Filtration Waste

Use : By Product

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: 0532.8388.9090

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)

Chemcare Asia: Tel: +65 6848 9048 - Mob: +65 8382 9188 - Fax: +65 6848 9013

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 : MSDS@CPChem.com
Website : www.CPChem.com**SECTION 2: Hazards identification****Emergency Overview****Form:** Solid **Physical state:** Solid **Color:** No data available

OSHA Hazards : Moderate eye irritant

GHS Classification: Eye irritation, Category 2A
Acute aquatic toxicity, Category 2
Chronic aquatic toxicity, Category 2**GHS-Labeling**

Symbol(s) :



Signal Word : Warning

Hazard Statements : H319: Causes serious eye irritation.

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H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements : **Prevention:**
 P264: Wash skin thoroughly after handling.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/ eye protection/ face protection.
Response:
 P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313: If eye irritation persists: Get medical advice/ attention.
 P391: Collect spillage.
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.

SECTION 3: Composition/information on ingredients

Component	CAS-No.	Weight %
Diatomaceous Earth	61790-53-2	10 - 40
1-Octene	111-66-0	5 - 10
1-Octene Homopolymer	25068-25-1	10 - 20
Alumina Oxide	1344-28-1	0 - 10
Treated aluminum silicate		0 - 10
Hexadecene, Branched	182636-01-7	0 - 1
Octenes	25377-83-7	0 - 1
Tetracosene, Branched	182636-05-1	0 - 1

SECTION 4: First aid measures

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance.

If inhaled : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

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.

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If swallowed : Keep respiratory tract clear. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

SECTION 5: Firefighting measures

Flash point : 57 °C (135 °F)

Unsuitable extinguishing media : High volume water jet.

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 fire fighting 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.

Fire and explosion protection : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

SECTION 6: Accidental release measures

Personal precautions : Use personal protective equipment. Avoid dust formation. Avoid breathing dust.

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 : Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage**Handling**

Advice on safe handling : Avoid formation of respirable particles. 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. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Storage

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

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SECTION 8: Exposure controls/personal protection**Ingredients with workplace control parameters****US**

Ingredients	Basis	Value	Control parameters	Note
Diatomaceous Earth	OSHA Z-1-A	TWA	6 mg/m ³	
	OSHA Z3	TWA	20 Million particles per cubic foot	a,
1-Octene	US WEEL	TWA	75 ppm,	
Alumina Oxide	OSHA Z-1	TWA	15 mg/m ³	total dust
	OSHA Z-1	TWA	5 mg/m ³	respirable fraction
	OSHA Z-1-A	TWA	10 mg/m ³	Total
	OSHA Z-1-A	TWA	5 mg/m ³	Respirable fraction
	ACGIH	TWA	1 mg/m ³	A4, varies, Respirable fraction

a Millions of particles per cubic foot of air, based on impinger samples counted by light-field techniques.
 A4 Not classifiable as a human carcinogen
 varies varies

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.

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, Dusts and Mists. 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.
- Eye protection : Eye wash bottle with pure water. Safety glasses.
- 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: Protective suit. Safety shoes.
- Hygiene measures : When using do not eat or drink. When using do not smoke.

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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 : Solid
Physical state : Solid
Color : No data available

Safety data

Flash point : 57 °C (135 °F)
Lower explosion limit : No data available
Upper explosion limit : No data available

pH : Not applicable

Melting point/range : No data available

Freezing point : No data available

Boiling point/boiling range : No data available

Vapor pressure : No data available

Density : No data available

Water solubility : Insoluble

Solubility in other solvents : Insoluble

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 : No data available.

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

SECTION 11: Toxicological information**mPAO Filtration Waste**

Acute oral toxicity : LD50 Oral: > 5,000 mg/kg
Species: rat
Method: Acute toxicity estimate

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**mPAO Filtration Waste
Acute inhalation toxicity**

: LC50: unknown

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Acute dermal toxicity**: : > 2,000 mg/kg
Species: rabbit**mPAO Filtration Waste
Skin irritation**

: May cause skin irritation in susceptible persons.

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Eye irritation**

: May irritate eyes.

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Sensitization**

: No data available.

Repeated dose toxicity**1-Octene**: Species: rat, Male and female
Sex: Male and female
Application Route: Oral diet
Dose: 0, 100, 500, 1000 mg/kg
Exposure time: 13 wk
Number of exposures: daily
NOEL: 1,000 mg/kg
Method: OCED Guideline 408
Information given is based on data obtained from similar substances.Species: rat, Male and female
Sex: Male and female
Application Route: Inhalation
Dose: 0, 300, 1000, 3000 ppm
Exposure time: 13 wk
Number of exposures: 6 hrs/d, 5 d/wk
NOEL: 3000 ppm
Method: OECD Guideline 413
Information given is based on data obtained from similar substances.**Reproductive toxicity****1-Octene**: Species: rat
Sex: male
Application Route: Oral diet
Dose: 0, 100, 500, or 1000 mg/kg
Exposure time: 44 D
Number of exposures: daily
Method: OECD Guideline 421
NOAEL Parent: 1,000 mg/kg
NOAEL F1: 1,000 mg/kg

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Species: rat
 Sex: female
 Application Route: Oral diet
 Dose: 0, 100, 500, or 1000 mg/kg
 Exposure time: 41-55 D
 Number of exposures: daily
 Method: OECD Guideline 421
 NOAEL Parent: 1,000 mg/kg
 NOAEL F1: 1,000 mg/kg

Aspiration toxicity

1-Octene :

CMR effects

1-Octene : Carcinogenicity: Not available
 Mutagenicity: Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
 Teratogenicity: Not available
 Reproductive toxicity: Animal testing did not show any effects on fertility.

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Further information : No data available.

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

1-Octene : LC50: 0.87 mg/l
 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.

Alumina Oxide NOEC: > 100 mg/l
 Exposure time: 96 h
 Species: Salmo salar (Atlantic salmon)
 Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates

1-Octene : EC50: 1 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.

Alumina Oxide EC50: > 100 mg/l
 Exposure time: 48 h
 Species: Daphnia magna (Water flea)
 Method: OECD Test Guideline 202

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Toxicity to algae

1-Octene : EC50: 1 - 10 mg/l
 Exposure time: 96 h
 Species: Pseudokirchneriella subcapitata
 Method: OECD Test Guideline 201
 Information given is based on data obtained from similar substances.

Alumina Oxide NOEC: > 100 mg/l
 Exposure time: 72 h
 Species: Selenastrum capricornutum (algae)
 Method: OECD Test Guideline 201

Biodegradability

1-Octene : Result: Readily biodegradable.
 67 - 98 %
 Testing period: 28 d
 This material is expected to be readily biodegradable.
 Information given is based on data obtained from similar substances.

Results of PBT assessment

1-Octene : Non-classified PBT substance, Non-classified vPvB substance

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
 Toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

The information in this MSDS 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.

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

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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 MSDS and the bill of lading.

US DOT (UNITED STATES DEPARTMENT OF TRANSPORTATION)

UN1325, FLAMMABLE SOLIDS, ORGANIC, N.O.S., (1-OCTENE), 4.1, II, RQ (1-OCTENE)

IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

UN1325, FLAMMABLE SOLID, ORGANIC, N.O.S., (1-OCTENE), 4.1, II, (57 °C), MARINE POLLUTANT, (1-OCTENE)

IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

UN1325, FLAMMABLE SOLID, ORGANIC, N.O.S., (1-OCTENE), 4.1, II

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

UN1325, FLAMMABLE SOLID, ORGANIC, N.O.S., (1-OCTENE), 4.1, II, (E), ENVIRONMENTALLY HAZARDOUS, (1-OCTENE)

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

UN1325, FLAMMABLE SOLID, ORGANIC, N.O.S., (1-OCTENE), 4.1, II, ENVIRONMENTALLY HAZARDOUS, (1-OCTENE)

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

UN1325, FLAMMABLE SOLID, ORGANIC, N.O.S., (1-OCTENE), 4.1, II, ENVIRONMENTALLY HAZARDOUS, (1-OCTENE)

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** : Acute Health Hazard**EPCRA - EMERGENCY PLANNING COMMUNITY RIGHT - TO - KNOW****CERCLA Reportable Quantity** : This material does not contain any components with a CERCLA RQ.

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- SARA 302 Reportable Quantity : This material does not contain any components with a SARA 302 RQ.
- SARA 302 Threshold Planning Quantity : SARA 302: 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 : The following components are subject to reporting levels established by SARA Title III, Section 313:
- : Alumina Oxide - 1344-28-1

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).

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 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

US State Regulations**Pennsylvania Right To Know**

- : Diatomaceous Earth - 61790-53-2
1-Octene - 111-66-0
Alumina Oxide - 1344-28-1

New Jersey Right To Know

- : Diatomaceous Earth - 61790-53-2
Alumina Oxide - 1344-28-1

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.

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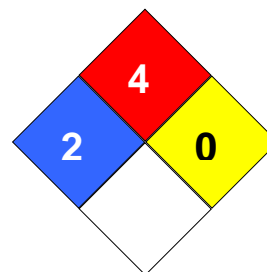
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Notification status

Europe REACH : Not in compliance with the inventory
 United States of America US.TSCA : On TSCA Inventory
 Canada NDSL : This product contains one or several components listed in the Canadian NDSL list.
 Australia AICS : Not in compliance with the inventory
 New Zealand NZIoC : Not in compliance with the inventory
 Japan ENCS : Not in compliance with the inventory
 Korea KECI : Not in compliance with the inventory
 Philippines PICCS : Not 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: 4
 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 MSDS pertains only to the product as shipped.

The information provided in this Material 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

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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
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%		