

Version 3.1 Revision Date 2016-05-13

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

**Product information** 

Product Name : Marlex® 5561 Polyethylene

Material : 1042507, 1040487, 1040490, 1042510, 1042505, 1042506,

1042509, 1042508, 1044445, 1044444, 1044443, 1044442,

1044441

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

MEDICAL APPLICATION CAUTION: Do not use this material in medical applications involving permanent implantation in the human body or permanent contact with internal body fluids or tissues fluids or tissues.

Do not use this material in medical applications involving brief or temporary implantation in the human body or contact with internal body fluids or tissues unless the material has been provided directly from Chevron Phillips Chemical Company LP or its legal affiliates under an agreement which expressly acknowledges the contemplated use.

Chevron Phillips Chemical Company LP and its legal affiliates makes no representation, promise, express warranty or implied warranty concerning the suitability of this material for use in implantation in the human body or in contact with internal body fluids or tissues.

#### **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.

SDS Number:10000000556 1/11

Version 3.1 Revision Date 2016-05-13

### **Emergency Overview**

Warning

Form: Pellets Physical state: Solid Color: Opaque Odor: Mild to no odor

OSHA Hazards : Combustible dust

Classification

: Combustible dust

Labeling

Signal Word : Warning

Hazard Statements : May form combustible dust concentrations in air.

While this product may not be a combustible dust as sold, further processing or handling may form combustible dust

concentration in air.

**Potential Health Effects** 

Physical Hazards : Pellets may cause a slip hazard on hard surfaces.

Mechanical processing may form combustible dust concentrations in air and thermal processing at elevated

temperatures may generate formaldehyde.

Inhalation : Repeated exposure to dust from this material may cause

respiratory irritation.

Fumes generated during thermal processing may cause

irritation of the upper respiratory tract.

Skin : Contact with the skin is not expected to cause prolonged or

significant irritation.

Contact with the skin is not expected to cause an allergic

response.

If this material is heated, thermal burns may result from contact.

Thermal burns may include pain or feeling of heat,

discolorations, swelling, and blistering.

Eyes : Contact with the eyes may cause irritation due to the abrasive

action.

Not expected to cause prolonged or significant eye irritation. Thermal burns may result if heated material contacts eye.

Ingestion : Ingestion of this product is not a likely route of exposure.

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

SDS Number:100000000556 2/11

# Marlex® 5561 Polyethylene

Version 3.1 Revision Date 2016-05-13

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 %
Polyethylene	9002-88-4	99 - 100

#### **SECTION 4: First aid measures**

If inhaled : Move to fresh air in case of accidental inhalation of dust or

fumes from overheating or combustion. If symptoms persist,

call a physician.

In case of skin contact : If the molten material gets on skin, quickly cool in water. Seek

immediate medical attention. Do not try to peel the solidified material from the skin or use solvents or thinners to dissolve it.

In case of eye contact : In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

If swallowed : Do not induce vomiting without medical advice.

#### **SECTION 5: Firefighting measures**

Flash point : No data available

Autoignition temperature : No data available

Suitable extinguishing

media

: Water. Water mist. Dry chemical. Carbon dioxide (CO2). Foam. If possible, water should be applied as a spray from a fogging nozzle since this is a surface burning material. The application of high velocity water will spread the burning surface layer. Avoid the use of straight streams that may create a dust cloud and the risk of a dust explosion. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards during fire

fighting

Risks of ignition followed by flame propagation or secondary explosions can be caused by the accumulation of dust, e.g. on

floors and ledges.

Special protective

equipment for fire-fighters

Use personal protective equipment. Wear self-contained

breathing apparatus for firefighting if necessary.

Further information : This material will burn although it is not easily ignited.

Fire and explosion : Treat as a solid that can burn. Avoid generating dust; fine dust

SDS Number:10000000556 3/11

# Marlex® 5561 Polyethylene

Version 3.1 Revision Date 2016-05-13

protection dispersed in air in sufficient concentrations, and in the

presence of an ignition source is a potential dust explosion

hazard.

Hazardous decomposition

products

Normal combustion forms carbon dioxide, water vapor and may

produce carbon monoxide, other hydrocarbons and

hydrocarbon oxidation products (ketones, aldehydes, organic

acids) depending on temperature and air availability. Incomplete combustion can also produce formaldehyde.

#### **SECTION 6: Accidental release measures**

Personal precautions : Sweep up to prevent slipping hazard. Avoid breathing dust.

Avoid dust formation.

Environmental precautions : Do not contaminate surface water. Prevent product from

entering drains.

Methods for cleaning up : Clean up promptly by sweeping or vacuum.

Additional advice : Dust deposits should not be allowed to accumulate on

surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with

compressed air).

### SECTION 7: Handling and storage

#### Handling

Advice on safe handling : Use good housekeeping for safe handling of the product.

Keep out of water sources and sewers.

Spilled pellets and powders may create a slipping 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. At elevated temperatures (>350°F, >177°C), polyethylene can release vapors and gases, which are irritating to the mucous membranes of the eyes, mouth,

throat, and lungs. These substances may include

acetaldehyde, acetone, acetic acid, formic acid, formaldehyde

and acrolein. Based on animal data and limited

epidemiological evidence, formaldehyde has been listed as a carcinogen. Following all recommendations within this SDS should minimize exposure to thermal processing emissions.

Advice on protection against fire and explosion

Treat as a solid that can burn. Avoid generating dust; fine dust

dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion

hazard.

#### **Storage**

Requirements for storage : Keep in a dry place. Keep in a well-ventilated place.

SDS Number:10000000556 4/11

# Marlex® 5561 Polyethylene

Version 3.1 Revision Date 2016-05-13

areas and containers

Advice on common storage : Do not store together with oxidizing and self-igniting products.

## SECTION 8: Exposure controls/personal protection

# **Engineering measures**

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 : No respiratory protection is normally required. If heated

material generates vapor or fumes that are not adequately controlled by ventilation, wear an appropriate respirator. Use the following elements for air-purifying respirators: Organic Vapor and Formaldehyde. 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. Dust safety masks are recommended when the

dust concentration is excessive.

Eye protection : Use of safety glasses with side shields for solid handling is

good industrial practice. If this material is heated, wear chemical goggles or safety glasses with side shields or a face shield. If there is potential for dust, use chemical goggles.

Skin and body protection : At ambient temperatures use of clean and protective clothing is

good industrial practice. If the material is heated or molten, wear thermally insulated, heat-resistant gloves that are able to withstand the temperature of the molten product. If this material is heated, wear insulated clothing to prevent skin contact if engineering controls or work practices are not

adequate.

#### **SECTION 9: Physical and chemical properties**

## Information on basic physical and chemical properties

#### **Appearance**

Form : Pellets
Physical state : Solid
Color : Opaque
Odor : Mild to no odor
Odor Threshold : No data available

Safety data

Flash point : No data available

SDS Number:10000000556 5/11

# Marlex® 5561 Polyethylene

Version 3.1 Revision Date 2016-05-13

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

Autoignition temperature : No data available

Thermal decomposition : Low molecular weight hydrocarbons, alcohols, aldehydes,

acids and ketones can be formed during thermal processing.

рΗ : Not applicable

: 90 - 140 °C (194 - 284 °F) Melting point/range

Freezing point Not applicable

Initial boiling point and boiling : Not applicable

range

Vapor pressure

Relative density : Not applicable

: 0.91 - 0.97 g/cm3 Density

Water solubility : Negligible

Partition coefficient: n-

octanol/water

: No data available

: Not applicable

Solubility in other solvents

: No data available

Viscosity, dynamic : Not applicable

Viscosity, kinematic : Not applicable

Relative vapor density : Not applicable

Evaporation rate : Not applicable

#### **SECTION 10: Stability and reactivity**

: This material is considered non-reactive under normal Reactivity

ambient and anticipated storage and handling conditions of

temperature and pressure.

This material is considered stable under normal ambient and Chemical stability

anticipated storage and handling conditions of temperature

and pressure.

## Possibility of hazardous reactions

Conditions to avoid : Avoid prolonged storage at elevated temperature.

Materials to avoid Avoid contact with strong oxidizing agents.

SDS Number:100000000556 6/11

Version 3.1 Revision Date 2016-05-13

Thermal decomposition : Low molecular weight hydrocarbons, alcohols, aldehydes,

acids and ketones can be formed during thermal processing.

Hazardous decomposition

products

: Normal combustion forms carbon dioxide, water vapor and may produce carbon monoxide, other hydrocarbons and hydrocarbon oxidation products (ketones, aldehydes, organic acids) depending on temperature and air availability. Incomplete combustion can also produce formaldehyde.

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

## **SECTION 11: Toxicological information**

Marlex® 5561 Polyethylene

Acute oral toxicity : Presumed Not Toxic

Marlex® 5561 Polyethylene

Acute inhalation toxicity : Presumed Not Toxic

Marlex® 5561 Polyethylene

Acute dermal toxicity : Presumed Not Toxic

Marlex® 5561 Polyethylene

**Skin irritation** : No skin irritation

Marlex® 5561 Polyethylene

**Eye irritation** : No eye irritation

Marlex® 5561 Polyethylene

**Sensitization** : Did not cause sensitization on laboratory animals.

Marlex® 5561 Polyethylene

Further information : This product contains POLYMERIZED OLEFINS. During

thermal processing (>350°F, >177°C) polyolefins can release vapors and gases (aldehydes,ketones and organic acids) which are irritating to the mucous membranes of the eyes, mouth, throat, and lungs. Generally these irritant effects are all transitory. However, prolonged exposure to irritating off-gases can lead to pulmonary edema. Formaldehyde (an aldehyde) has been classified as a carcinogen based on animal data and

limited epidemiological evidence.

## **SECTION 12: Ecological information**

### **Ecotoxicity effects**

Elimination information (persistence and degradability)

SDS Number:100000000556 7/11

# Marlex® 5561 Polyethylene

Version 3.1 Revision Date 2016-05-13

Bioaccumulation : Does not bioaccumulate.

Mobility : The product is insoluble and floats on water.

Biodegradability : This material is not expected to be readily biodegradable.

**Ecotoxicology Assessment** 

Additional ecological

information

: This material is not expected to be harmful to aquatic organisms., Fish or birds may eat pellets which may obstruct

their digestive tracts.

#### **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.

## **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)**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

## IMO / IMDG (INTERNATIONAL MARITIME DANGEROUS GOODS)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

#### IATA (INTERNATIONAL AIR TRANSPORT ASSOCIATION)

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

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

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

SDS Number:10000000556 8/11

# Marlex® 5561 Polyethylene

Version 3.1 Revision Date 2016-05-13

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

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

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

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

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

**CERCLA Reportable** 

Quantity

: This material does not contain any components with a CERCLA

RQ.

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

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).

SDS Number:10000000556

9/11

Version 3.1 Revision Date 2016-05-13

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (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 : 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

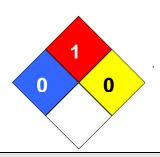
DSL

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: 0

Fire Hazard: 1 Reactivity Hazard: 0



SDS Number:10000000556 10/11

Version 3.1 Revision Date 2016-05-13

#### **Further information**

Legacy SDS Number : 240370

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
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%		

SDS Number:10000000556 11/11