SAFETY DATA SHEET



Marlex® 5563 Polyethylene

Version 3.4

Revision Date 2019-10-09

Product information		
Product Name Material	: 104251	® 5563 Polyethylene 3, 1044446, 1044447, 1040497, 1042512, 1042514, 5, 1042516, 1044448, 1044449, 1044450, 1040494
Company	10001	on Phillips Chemical Company LP Six Pines Drive oodlands, TX 77380
Emergency telephone	:	
EUROPE: BIG +32. Mexico CHEMTREC	ernational) 4.9300 or 703.52 I (+612 9186 1132 14.584545 (phone C 01-800-681-953 -Cotec Inside Bra	2) China: 0532 8388 9090 e) or +32.14583516 (telefax)
Responsible Departme E-mail address Website	: SDS@	t Safety and Toxicology Group CPChem.com PChem.com
		o not use this material in medical applications involving dy or permanent contact with internal body fluids or tissues
human body or contact	with internal body hillips Chemical (cations involving brief or temporary implantation in the y fluids or tissues unless the material has been provided Company LP or its legal affiliates under an agreement which ed use.
express warranty or im	olied warranty cor	and its legal affiliates makes no representation, promise, ncerning the suitability of this material for use in implantation rnal body fluids or tissues.
Number:10000000055	7	1/12

SAFETY DATA SHEET

Marlex® 5563 Polyethylene

Version 3.4

Revision Date 2019-10-09

SECTION 2: Hazards identification

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 by NTP.

SAFETY DATA SHEET

Version 3.4

Revision Date 2019-10-09

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 du fumes from overheating or combustion. If symptoms call a physician.	
In case of skin contact	: If the molten material gets on skin, quickly cool in wate immediate medical attention. Do not try to peel the sc material from the skin or use solvents or thinners to di	lidified
In case of eye contact	: In the case of contact with eyes, rinse immediately wit of water and seek medical advice.	h plenty
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 protection	:	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.
Hazardous decomposition products	:	Normal combustion forms carbon dioxide, water vapor and may produce carbon monoxide, other hydrocarbons and hydrocarbon oxidation products (ketones, aldehydes, organic
SDS Number:10000000557		3/12

Version 3.4

Revision Date 2019-10-09

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 areas and containers	:	Keep in a dry place. Keep in a well-ventilated place.
Advice on common storage	:	Do not store together with oxidizing and self-igniting products.
SDS Number:10000000557		4/12

SAFETY DATA SHEET

Marlex® 5563 Polyethylene

Version 3.4

Revision Date 2019-10-09

SECTION 8: Exposure controls/personal protection

Ingredients with workplace control parameters

US

Components	Basis	Value	Control parameters	Note
Nuisance Dust	OSHA Z-3	TWA	15 mg/m3	Total dust
	OSHA Z-3	TWA	5 mg/m3	(respirable dust)

Control as Particulate Not Otherwise Classified (PNOC). The ACGIH Guideline* for respirable dust is 3.0 mg/m3 and 10.0 mg/m3 for total dust. The OSHA PEL for respirable dust is 5.0 mg/m3 and 15.0 mg/m3 for total dust. * This value is for inhalable (total) particulate matter containing no asbestos and < 1.0% crystalline silica.

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 cher	nica	I properties

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

sion 3.4	Revision Date 2019-10
Flash point	: No data available
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.
рН	: Not applicable
Melting point/range	: 90 - 140 °C (194 - 284 °F)
Freezing point	Not applicable
Initial boiling point and boiling	: Not applicable
range Vapor pressure	: Not applicable
Relative density	: Not applicable
Density	: 0.91 - 0.97 g/cm3 Please refer to the Technical Data Sheet (TDS) for more detailed information relating to the nominal physical properties, including density, of this polyethylene resin grade.
Water solubility	: Negligible
Partition coefficient: n-	: No data available
octanol/water 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

Reactivity

: This material is considered non-reactive under normal ambient and anticipated storage and handling conditions of temperature and pressure.

SDS Number:10000000557

rlex® 5563 Polyethyl	SAFETY DATA SHE
sion 3.4	Revision Date 2019-10
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous rea	ctions
Conditions to avoid	: Avoid prolonged storage at elevated temperature.
Materials to avoid	: Avoid contact with strong oxidizing agents.
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.
TION 11: Toxicological infor	mation
<u></u>	
Marlex® 5563 Polyethylene Acute oral toxicity	: Presumed Not Toxic
Marlex® 5563 Polyethylene Acute inhalation toxicity	: Presumed Not Toxic
Marlex® 5563 Polyethylene Acute dermal toxicity	: Presumed Not Toxic
Marlex® 5563 Polyethylene Skin irritation	: No skin irritation
Marlex® 5563 Polyethylene Eye irritation	: No eye irritation
Marlex® 5563 Polyethylene Sensitization	: Did not cause sensitization on laboratory animals.
Marlex® 5563 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.
Number:100000000557	Imited epidemiological evidence. 7/12

Version 3.4

SECTION 12: Ecological information

Ecotoxicity effects

Biodegradability: This material is not expected to be readily biodegradable.Elimination information (persistence and degradability)Bioaccumulation: Does not bioaccumulate.Mobility: The product is insoluble and floats on water.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.

Ecotoxicology Assessment

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)

SDS Number:10000000557

8/12

arlex® 5563 Polyeth	SAFETY DATA SHE
rsion 3.4	Revision Date 2019-10-
NOT REGULATED AS A TRANSPORTATION BY	A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.
	ANGEROUS GOODS BY ROAD (EUROPE)) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.
DANGEROUS GOODS (EL	A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR
OF DANGEROUS GOODS	MENT CONCERNING THE INTERNATIONAL CARRIAGE BY INLAND WATERWAYS) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR
-	Annex II of MARPOL 73/78 and the IBC Code
CTION 15: Regulatory inform	mation
CTION 15: Regulatory inform	mation
	mation : Combustible dust
National legislation	
National legislation SARA 311/312 Hazards CERCLA Reportable	: Combustible dust : This material does not contain any components with a CERCLA
National legislation SARA 311/312 Hazards CERCLA Reportable Quantity SARA 302 Reportable	 Combustible dust This material does not contain any components with a CERCLA RQ. This material does not contain any components with a SARA
National legislation SARA 311/312 Hazards CERCLA Reportable Quantity SARA 302 Reportable Quantity SARA 302 Threshold	 Combustible dust This material does not contain any components with a CERCLA RQ. This material does not contain any components with a SARA 302 RQ. No chemicals in this material are subject to the reporting
SARA 311/312 Hazards CERCLA Reportable Quantity SARA 302 Reportable Quantity SARA 302 Threshold Planning Quantity SARA 304 Reportable	 Combustible dust This material does not contain any components with a CERCLA RQ. This material does not contain any components with a SARA 302 RQ. No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. This material does not contain any components with a section

SAFETY DATA SHEET

Version 3.4

Revision Date 2019-10-09

Clean Air Act	
Ozone-Depletion : This pro Potential Class II	oduct neither contains, nor was manufactured with a Class I or ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR pt. A, App.A + B).
This product does not contain Act Section 112 (40 CFR 61).	any hazardous air pollutants (HAP), as defined by the U.S. Clean Air
This product does not contain Accidental Release Prevention	any chemicals listed under the U.S. Clean Air Act Section 112(r) for (40 CFR 68.130, Subpart F).
This product does not contain Intermediate or Final VOC's (4	any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI 0 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 Components	: 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 Switzerland CH INV United States of America (USA TSCA Canada DSL Australia AICS New Zealand NZIoC Japan ENCS Korea KECI	 This mixture contains only ingredients which have been registered according to Regulation (EU) No. 1907/2006 (REACH). On the inventory, or in compliance with the inventory On or in compliance with the active portion of the TSCA inventory All components of this product are on the Canadian DSL On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory In this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance.

SDS Number:100000000557

Version 3.4

Revision Date 2019-10-09

Philippines PICCS	
China IECSC	
Taiwan TCSI	

On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory

On the inventory, or in compliance with the inventory

SECTION 16: Other information

NFPA Classification	: Health Hazard: 0 Fire Hazard: 1 Reactivity Hazard: 0	
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.

÷

1

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.

ACGIH	American Conference of	LD50	Lethal Dose 50%
	Government Industrial Hygienists		
AICS	Australia, Inventory of Chemical	LOAEL	Lowest Observed Adverse Effect
	Substances		Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic	NIOSH	National Institute for Occupational
	Substances List		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	OSHA	Occupational Safety & Health
	Scenario Tool		Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
EINECS	European Inventory of Existing	PICCS	Philippines Inventory of
	Chemical Substances		Commercial Chemical Substance
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

SDS Number:10000000557

SAFETY DATA SHEET

Version 3.4

Revision Date 2019-10-09

			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:10000000557

12/12