

Marlex® D353 Polyethylene

Version 1.5

Revision Date 2024-08-29

According to Regulation (EC) No. 1907/2006, Regulation (EC) No. 2020/878

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

1.1 Product identifier

Product information

Product Name	:	Marlex® D353 Polyethylene
Material	:	1019574, 1018375, 1019575, 1018378, 1019577, 1019578,
		1019032, 1019033, 1019034, 1019035, 1019576, 1019031

EC-No.Registration number

Chemical name	CAS-No. EC-No.	Legal Entity Registration number
	Index No.	registration number
Ethylene	74-85-1 200-815-3 601-010-00-3	Chevron Phillips Chemical Company LP 01-2119462827-27-0004
Ethylene	74-85-1 200-815-3 601-010-00-3	Chevron Phillips Chemicals International NV 01-2119462827-27-0271
1-Hexene	592-41-6 209-753-1	Chevron Phillips Chemical Company LP 01-2119475505-34-0005
1-Hexene	592-41-6 209-753-1	Chevron Phillips Chemicals International NV 01-2119475505-34-0021

1.2

	Relevant identified uses of the	he	substance or mixture and uses advised against
1 2	Relevant Identified Uses Supported	:	Manufacture of plastics products
1.3 Details of the supplier of the safety data sheet		afety data sheet	
	Company	:	Chevron Phillips Chemical Company LP 10001 Six Pines Drive The Woodlands, TX 77380
	Local	:	Chevron Phillips Chemicals International N.V. Airport Plaza (Stockholm Building) Leonardo Da Vincilaan 19 1831 Diegem Belgium
SDS	S Number:10000000669		1/13

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Respon Email:s	equests: (800) 852-5530 nsible Party: Product Safety Group sds@cpchem.com
1.4 Emergency telephone:	
Argentina: +(54)-1159839431EUROPE: BIG +32.14.584545 (phoneAustria: VIZ +43 1 406 43 43 (24 hourBelgium: 070 245 245 (24 hours/day,Bulgaria: +359 2 9154 233Croatia: +3851 2348 342 (24 hours/day)Cyprus: 1401Czech Republic: Toxicological InformDenmark: Danish Poison Center (GiftEstonia: BIG +32.14.584545 (phone)Finland: 0800 147 111 09 471 977 (2France: ORFILA number (INRS): + 33Germany: BIG +32.14.584545 (phone)Finland: 0800 147 111 09 471 977 (2France: ORFILA number (INRS): + 33Germany: BIG +32.14.584545 (phone)Greece: (0030) 2107793777 (24 hourHungary: +36-80-201-199 (24 hours/da)Iceland: 543 2222 (24 hours/day, 7 da)Ireland: BIG +32.14.584545 (phone) ofItaly: POISON CENTER MILAN – Azi66101029; POISON CENTER ROMEclinica Tel. +39 06 3054343; POISONTel. +39 06 68593726; POISON CENTPOISON CENTER FLORENCE – Azi7947819; POISON CENTER RAPLES – AziencePOISON CENTER FLORENCE – Azi7947819; POISON CENTER BERGAMO300; POISON CENTER VERONA – A858;Latvia: State Fire and Rescue Service	 2) China: 0532 8388 9090 1 (24 hours) 1zil: 0800.111.767 Outside Brazil: +55.19.3467.1600 e) or +32.14583516 (telefax) rs/day, 7 days/week) 7 days/week) ation Center +420 224 919 293, +420 224 915 402 linjen): +45 8212 1212 or +32.14583516 (telefax) 24 hours/day) 3 (0) 1 45 42 59 59 (24 hours/day, 7 days/week) e) or +32.14583516 (telefax) s/day, 7 days/week) day, 7 days/week) day, 7 days/week) day, 7 days/week) day, 7 days/week) or +32.14583516 (telefax) s/day, 7 days/week) day, 7 days/week) do spedaliera Niguarda Ca` Grande Tel. +39 02 Policlinico "Agostino Gemelli", Servizio di tossicologia I CENTER ROME – Ospedale Pediatrico Bambino Gesù TER ROME – Policlinico "Umberto I" Tel. +39 084 732326; la Ospedaliera universitaria Riuniti Tel. +39 081 7472870; enda Ospedaliera universitaria Careggi Tel. +39 055 - IRCCS Fondazione Salvatore Maugeri Tel. +39 0382 D – Azienda Ospedaliera Universitaria integrata Tel. 800 011 e, phone number: 112; Toxicology and Sepsis Clinic ter, Hipokräta 2, Riga, Latvia, LV-1038, phone number +371 hone) or +32.14583516 (telefax) sours/day, 7 days/week) 45 8000 7 days/week) or +32.14583516 (telefax)

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Spain: National Emergency Telephone Number of Spanish Poison Centre: +34 91 562 04 20 (24 hours/day, 7 days/week) Sweden: 112 – ask for Poisons Information

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

2.1

Classification of the substance or mixture REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2

Labeling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.3

Other hazards

Endocrine disrupting properties : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 - 3.2 Substance or Mixture

Hazardous ingredients

	Chemical name	CAS-No. EC-No. Index No.	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]	Specific Conc. Limits, M-factors and ATEs
	Polyethylene Hexene Copolymer	25213-02-9		99 - 100	
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B.4 -		SAFETY DATA SHEET
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г	Contains no hazardous ingredie	ents according to GHS :
SEC	CTION 4: First aid measures	
4.1	Description of first-aid measu	ures
	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.
4.2	Most important symptoms an Notes to physician	d effects, both acute and delayed
	Symptoms :	No data available.
4.3	Risks : Indication of any immediate n	No data available. nedical attention and special treatment needed
	Treatment :	No data available.
SEC	CTION 5: Firefighting measure	S
	Flash point :	No data available
	Autoignition temperature :	No data available
5.1		
	Extinguishing media	
	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.
5.2	Special hazards arising from Specific hazards during fire :	the substance or mixture Risks of ignition followed by flame propagation or secondary
	fighting	explosions can be caused by the accumulation of dust, e.g. on floors and ledges.
5.3	Advice for firefighters	
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	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 acids) depending on temperature and air availability. Incomplete combustion can also produce formaldehyde.
SEC	TION 6: Accidental release n	nea	asures
6.1	Personal precautions, prote	cti	ve equipment and emergency procedures
~ ~	Personal precautions	:	Sweep up to prevent slipping hazard. Avoid breathing dust. Avoid dust formation.
6.2	Environmental precautions		
	Environmental precautions	:	Do not contaminate surface water. Prevent product from entering drains.
6.3	Methods and materials for containment and cleaning up 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).
6.4	Reference to other sections		
	Reference to other sections	:	For personal protection see section 8. For disposal considerations see section 13.
SEC	TION 7: Handling and storag	le	
7.1	Precautions for safe handlin Handling	ŋg	
	Advice on safe handling	:	Use good housekeeping for safe handling of the product. Keep out of water sources and sewers. Spilled pellets 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,

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	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.
7.2 Conditions for safe storage	, including any incompatibilities
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.

SECTION 8: Exposure controls/personal protection

8.2

Exposure controls 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. A positive pressure, air-supplying respirator may be appropriate if there is potential for uncontrolled release, aerosolization, 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 Skin and body 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. At ambient temperatures use of clean and protective clothing is
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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

9.1 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 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. pН : 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 SDS Number:10000000669 7/13

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Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: Not applicable
Relative vapor density	: Not applicable
Evaporation rate	: Not applicable
SECTION 10: Stability and reacti	vity
10.1	
Reactivity	: This material is considered non-reactive under normal ambient and anticipated storage and handling conditions of temperature and pressure.
10.2	
Chemical stability	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
10.3 Possibility of hazardous rea	ctions
Hazardous reactions	: Hazardous reactions: None known.
10.4 Conditions to avoid	: Avoid prolonged storage at elevated temperature.
10.5 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.
10.6 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 infor	mation
11.1 Information on toxicological	effects
Marlex® D353 Polyethylene Acute oral toxicity	: Presumed Not Toxic
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Marlex® D353 Polyethylene Acute inhalation toxicity	: Presumed Not Toxic
Marlex® D353 Polyethylene Acute dermal toxicity	: Presumed Not Toxic
Marlex® D353 Polyethylene Skin irritation	: No skin irritation
Marlex® D353 Polyethylene Eye irritation	: No eye irritation
Marlex® D353 Polyethylene Sensitization	: Did not cause sensitization on laboratory animals.
11.2 Information on other hazards	
Marlex® D353 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.
Endocrine disrupting properties	: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
SECTION 12: Ecological informati	on
40.4	
12.1 Toxicity	
Ecotoxicity effects	
12.2 Persistence and degradability	y
Biodegradability	: This material is not expected to be readily biodegradable.
12.3 Bioaccumulative potential Elimination information (persiste	ence and degradability)
Bioaccumulation	: Does not bioaccumulate.
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12.4								
	Mobility in soil							
	Mobility	:	The product is insoluble and floats on water.					
12.5 12.6	Results of PBT and vPvB assessment							
	Endocrine disrupting properties							
	Endocrine disrupting properties	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.					
12.7	12.7 Other adverse effects							
	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.					
12.8	2.8 Additional Information							
	Ecotoxicology Assessment							
	Short-term (acute) aquatic hazard	:	This material is not expected to be harmful to aquatic organisms.					
	Long-term (chronic) aquatic hazard	:	This material is not expected to be harmful to aquatic organisms.					
SEC	SECTION 13: Disposal considerations							

13.1

Waste treatment methods

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

14.1 - 14.7

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

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description for the material. bill of lading.	Flashpoints for the material may vary slightly between the SDS and the					
	DEPARTMENT OF TRANSPORTATION) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.					
	NAL MARITIME DANGEROUS GOODS) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.					
	R TRANSPORT ASSOCIATION) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.					
ADR (AGREEMENT ON DA NOT REGULATED AS A TRANSPORTATION BY	ANGEROUS GOODS BY ROAD (EUROPE)) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.					
DANGEROUS GOODS (EL	HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR					
OF DANGEROUS GOODS	MENT CONCERNING THE INTERNATIONAL CARRIAGE BY INLAND WATERWAYS) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY.					
Maritime transport in bulk according to IMO instruments SECTION 15: Regulatory information						
15.1						
	mental regulations/legislation specific for the substance or mixture					
the European Parliament ar	Commission Regulation (EU) 2020/878 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)					
Water hazard class (Germany)	: nwg not water endangering					
15.2						
Major Accident Hazard Legislation	: 96/82/EC Update: 2003 Directive 96/82/EC does not apply					
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Notification status	
Europe REACH	: Not in compliance with the inventory
Switzerland CH INV	: Not in compliance with the inventory
United States of America (USA)	: On or in compliance with the active portion of the
TSCA	TSCA inventory
Canada DSL	: All components of this product are on the Canadian DSL
Australia AIIC	: Not 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	: A substance(s) 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 or the exported
	amount does not exceed the minimum threshold
	quantity of the non-registered substance(s).
Philippines PICCS	: On the inventory, or in compliance with the inventory
Taiwan TCSI	: 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 : He	ealth Hazard: 0

Health Hazard: 0 Fire Hazard: 1 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.

ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AIIC	Australian Inventory of Industrial Chemicals	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic	NIOSH	National Institute for Occupational

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		1	
	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	PEL	Permissible Exposure Limit
	Chemicals Association		
EINECS	European Inventory of Existing	PICCS	Philippines Inventory of
	Chemical Substances		Commercial Chemical Substances
MAK	Germany Maximum Concentration	PRNT	Presumed Not Toxic
	Values		
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	TLV	Threshold Limit Value
	on Cancer		
IECSC	Inventory of Existing Chemical	TWA	Time Weighted Average
	Substances in China		
ENCS	Japan, Inventory of Existing and	TSCA	Toxic Substance Control Act
	New Chemical Substances		
KECI	Korea, Existing Chemical	UVCB	Unknown or Variable Composition,
	Inventory		Complex Reaction Products, and
			Biological Materials
<=	Less Than or Equal To	WHMIS	Workplace Hazardous Materials
			Information System
LC50	Lethal Concentration 50%	ATE	Acute toxicity estimate