

Marlex® 1122B Polyethylene

Version 3.2

Revision Date 2019-11-25

| CTION 1: Identification of | of the substance/mixture and of the company/undertaking |
|---|---|
| Product information | |
| Product Name Material | Marlex® 1122B Polyethylene 1044135, 1044131, 1040053, 1044133, 1040057, 1042130, 1042129, 1044136, 1042127, 1042126, 1042125, 1044132 |
| Company | : Chevron Phillips Chemical Company LP 10001 Six Pines Drive The Woodlands, TX 77380 |
| Emergency telephone | : |
| Asia: CHEMWATCH EUROPE: BIG +32.1 Mexico CHEMTREC | 24.9300 or 703.527.3887(int'l) H (+612 9186 1132) China: 0532 8388 9090 14.584545 (phone) or +32.14583516 (telefax) C 01-800-681-9531 (24 hours) -Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600 59839431 |
| E-mail address Website | : SDS@CPChem.com : www.CPChem.com |
| | ON CAUTION: Do not use this material in medical applications involving in the human body or permanent contact with internal body fluids or tissues |
| human body or contact directly from Chevron P | I in medical applications involving brief or temporary implantation in the with internal body fluids or tissues unless the material has been provided Phillips Chemical Company LP or its legal affiliates under an agreement which as the contemplated use. |
| express warranty or imp | ical Company LP and its legal affiliates makes no representation, promise, plied warranty concerning the suitability of this material for use in implantation of contact with internal body fluids or tissues. |
| | |
| Number:100000000535 | 5 1/12 |

Marlex® 1122B Polyethylene

Version 3.2

Revision Date 2019-11-25

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 3.2

SDS Number:10000000535

Revision Date 2019-11-25

SECTION 3: Composition/information on ingredients Component CAS-No. Weight % Polyethylene 9002-88-4 100 **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 the case of contact with eyes, rinse immediately with plenty In case of eye contact 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 : Water. Water mist. Dry chemical. Carbon dioxide (CO2). Foam. If possible, water should be applied as a spray from a media 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 Risks of ignition followed by flame propagation or secondary explosions can be caused by the accumulation of dust, e.g. on fighting floors and ledges. Use personal protective equipment. Wear self-contained Special protective : breathing apparatus for firefighting if necessary. equipment for fire-fighters 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 : protection dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Normal combustion forms carbon dioxide, water vapor and may Hazardous decomposition : produce carbon monoxide, other hydrocarbons and products hydrocarbon oxidation products (ketones, aldehydes, organic

SAFETY DATA SHEET

Version 3.2

Revision Date 2019-11-25

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

| SDS Number:10000000535 | 4/12 |
|---|---|
| Advice on common storage | : Do not store together with oxidizing and self-igniting products. |
| Requirements for storage areas and containers | : Keep in a dry place. Keep in a well-ventilated place. |
| Storage | |
| 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. |
| | 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. |
| | Spilled pellets and powders may create a slipping hazard. |
| Advice on safe handling | : Use good housekeeping for safe handling of the product. Keep out of water sources and sewers. |

Marlex® 1122B Polyethylene

Version 3.2

Revision Date 2019-11-25

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 | mica | I properties |

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

| No data available Not applicable Not applicable |
|---|
| |
| · Not applicable |
| : Not applicable |
| : No data available |
| : Low molecular weight hydrocarbons, alcohols, aldehydes, acids and ketones can be formed during thermal processing. |
| : Not applicable |
| : 90-140°C (194-284°F) |
| Not applicable |
| : Not applicable |
| : Not applicable |
| : Not applicable |
| : 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. |
| : Negligible |
| : No data available |
| : No data available |
| : 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:10000000535

| arlex® 1122B Polyeth | vlene |
|---|--|
| rsion 3.2 | Revision Date 2019-11 |
| Chemical stability | : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. |
| Possibility of hazardous read | 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. |
| CTION 11: Toxicological inform | nation |
| Ŭ | |
| Marlex® 1122B Polyethylene Acute oral toxicity | : Presumed Not Toxic |
| Marlex® 1122B Polyethylene Acute inhalation toxicity | : Presumed Not Toxic |
| Marlex® 1122B Polyethylene Acute dermal toxicity | |
| Marlex® 1122B Polyethylene Skin irritation | : No skin irritation |
| Marlex® 1122B Polyethylene Eye irritation | : No eye irritation |
| Marlex® 1122B Polyethylene Sensitization | : Did not cause sensitization on laboratory animals. |
| Marlex® 1122B 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. |

Version 3.2

SECTION 12: Ecological information

Ecotoxicity effects

information

 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
 : This material is not expected to be harmful to aquatic

organisms., Fish or birds may eat pellets which may obstruct

Ecotoxicology Assessment

| ••• | |
|--------------------------------------|---|
| Short-term (acute) aquatic hazard | : This product has no known ecotoxicological effects. |
| Long-term (chronic) aquatic hazard | : This product has no known ecotoxicological effects. |

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

SDS Number:10000000535

Marlex® 1122B Polyethylene

Revision Date 2019-11-25

Version 3.2

SDS Number:10000000535

TRANSPORTATION BY THIS AGENCY.

| | IR TRANSPORT ASSOCIATION) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR 7 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 | EMENT CONCERNING THE INTERNATIONAL CARRIAGE BY INLAND WATERWAYS) A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR THIS AGENCY. |
| | |
| nsport in bulk according to CTION 15: Regulatory infor | Annex II of MARPOL 73/78 and the IBC Code mation |
| | |
| CTION 15: Regulatory infor | |
| CTION 15: Regulatory infor | mation |
| CTION 15: Regulatory infor National legislation SARA 311/312 Hazards CERCLA Reportable | mation : Combustible dust : This material does not contain any components with a CERCLA |
| CTION 15: Regulatory infor National legislation SARA 311/312 Hazards CERCLA Reportable Quantity SARA 302 Reportable | mation Combustible dust This material does not contain any components with a CERCLA RQ. This material does not contain any components with a SARA |
| CTION 15: Regulatory infor National legislation SARA 311/312 Hazards CERCLA Reportable Quantity SARA 302 Reportable Quantity SARA 302 Threshold | mation 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 |

| arlav® 11220 Daluath | SAFETY DATA SHE |
|--|--|
| arlex® 1122B Polyeth rsion 3.2 | Revision Date 2019-11- |
| SARA 313 Components | : 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 | |
| Potential Class I | 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 opt. 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 |
| | any chemicals listed under the U.S. Clean Air Act Section 112(r) for n (40 CFR 68.130, Subpart F). |
| This product does not contair Intermediate or Final VOC's (| any chemicals listed under the U.S. Clean Air Act Section 111 SOCM 40 CFR 60.489). |
| US State Regulations | |
| Pennsylvania Right To Know | : No components are subject to the Pennsylvania Right to Know Act. |
| California Prop. 65 Components | : This product, as shipped, does not contain any carcinogens or reproductive toxins presently known by the State of California to cause cancer or reproductive toxicity at a level of exposure subject to the requirements of California Proposition 65. |
| Notification status Europe REACH Switzerland CH INV United States of America (US TSCA Canada DSL Australia AICS New Zealand NZIoC Japan ENCS | On the inventory, or in compliance with the inventory On the inventory, or in compliance with the inventory A) 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 A substance(s) in this product was not registered, notified to be registered, or exempted from registration by CPChem according to K-REACH regulations. |
| Korea KECI | Importation or manufacture of this product is still permitted provided the Korean Importer of Record has themselves notified the substance. |

SAFETY DATA SHEET

Version 3.2

Revision Date 2019-11-25

| 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

| 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 Effe |
| | Substances | | Level |
| DSL | Canada, Domestic Substances | NFPA | National Fire Protection Agence |
| | List | | |
| NDSL | Canada, Non-Domestic | NIOSH | National Institute for Occupation |
| | 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 Concentra |
| 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 Substar |
| MAK | Germany Maximum Concentration | PRNT | Presumed Not Toxic |
| | Values | | |
| GHS | Globally Harmonized System | RCRA | Resource Conservation Recov |
| | | | Act |
| >= | Greater Than or Equal To | STEL | Short-term Exposure Limit |
| IC50 | Inhibition Concentration 50% | SARA | Superfund Amendments and |

Marlex® 1122B Polyethylene

Version 3.2

Revision Date 2019-11-25

| | | | 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:10000000535