Chevron Phillips Chemical Company LP

Product Regulatory Overview (PRO)
Marlex® HXM 50100 Polyethylene

Product Manufacturer

Chevron Phillips Chemical Company LP
Qatar Chemical Company Ltd. (Q-Chem)

Chemical Inventories

All the components of this product are listed on
AUSTRALIA: Australian Inventory of Chemical Substances (AICS)
CANADA: Domestic Substances List (DSL)
PEOPLE'S REPUBLIC OF CHINA: Inventory of Existing Chemical Substances
EUROPEAN UNION: On the inventory, or in compliance with the inventory
JAPAN: Existing & New Chemical Substances (ENCS) Inventory
KOREA: Existing Chemicals List (ECL)
NEW ZEALAND: Inventory of Chemical Substances (NZIoCS)
PHILIPPINES: Philippine Inventory of Chemicals and Chemical Substances (PICCS)
UNITED STATES: Toxic Substances Control Act (TSCA) Chemical Inventory.

Food Contact

European Union (EU) Food Contact

All constituents of this resin are listed in Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food and all its Amendments.

This product was tested per EU Directive 82/711/EEC. The tested sample thickness was 0.39 mm (15 mils). This product was tested with 3% acetic acid, 50% ethanol, and olive oil for 2 hours contact at 70°C followed by 10 days at 40°C. This product complies with the overall and specific migration limits. It is suitable for contact with dry, aqueous, acidic, alcoholic (up to 50%) and fatty foodstuff, including milk products, for 2 hours at 70°C followed by a storage period longer than 24 hours at room temperature and any contact condition that can be considered as less severe.

This product does not contain any dual-use additive per EU Directive No 95/2/EC and its Amendments.

This product meets the requirements of Framework Regulation (EC) No. 1935/2004 of The European Parliament and of The Council of 27 October 2004, on materials and articles intended to come in contact with food and repealing Directives 80/590/EEC and 89/109/EEC.

This product is produced in accordance with good manufacturing practice (GMP) as outlined in GMP Regulation (EC) No 2023/2006.

U.S. FDA Food Contact

This product meet the requirements for polyolefin resins intended for food packaging applications as described in the FDA regulation 21 CFR 177.1520(c)3.2a. The resin may be used in contact with all types of foods as defined in Table 1, 21 CFR 176.170(c) and at use conditions B-H as defined in Table 2, 21 CFR 176.170(c).

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Product Regulatory Overview (PRO)
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This product is produced in accordance with good manufacturing practices (GMP) as outlined in 21 CFR 174.5.

Canada Food Contact

A "Letter of No Objection" for this product has been approved by Health Canada. This product may be used as a food-contact article such as bottle, food pail, cap, and casing under and at the temperature of 212 °F (100 °C).

China Food Contact

All additives of this resin are listed in GB 9685-2008 "Hygienic standards for uses of additives in food containers and packaging materials", and meet the relevant specific migration limits. There are no regulatory food type restrictions on this resin.

It is the responsibility of the converter to verify that the finished article meets both the technical and regulatory requirements of the intended application, and in particular does not modify the organoleptic properties of the food.

U.S. Pharmacopeia (USP)

This product meets the requirements of (USP 22), <661> Containers Physicochemical Tests and Polyethylene Containers.

European Pharmacopoeia (EUP)

This product has not been tested under any European Pharmacopoeia guidelines.

Drug Master File (DMF)

This product is listed in U.S. FDA Type III Drug Master File 1016.
This product is listed in Canadian Drug Master File 9389.

Directive 76/768/EEC of 1976-07-27 on the approximation of the laws of the Member States relating to cosmetic products

Directive 76/768/EEC is not applicable to this product. This product is not defined in the regulation as a cosmetic product, and it does not contain any substances listed as prohibited in cosmetic products.

EU Classification and Labeling

This product is not a dangerous substance according to Globally Harmonized System of Classification and Labeling of Chemicals (GHS) 1272/2008. It is also not a hazardous substance or mixture according to EC directives 67/548/EEC or 1999/45/EC.

California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

This product, as shipped, does not intentionally 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.

Consumer Product Safety Improvement Act of 2008 (H.R. 4040)

This product does not contain lead and phthalates. It therefore complies with the relevant sections of the Consumer Product Safety Improvement Act of 2008 (H.R. 4040).

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Clean Air Act

This product is in compliance with the federal Clean Air Act, as amended in 1990.

Heavy metals, RoHS, WEEE, Waste packaging, CONEG

No heavy metals (i.e., antimony, arsenic, barium, cadmium, chromium, lead, mercury, selenium, or silver) are purposely added to this product in quantities that would violate governmental guidelines. The summation of lead, cadmium, mercury, and hexavalent chromium in this product is less than 20 ppm. No polybrominated biphenyls (PBB), polybrominated diphenyl ethers (PBDE), and Deca Brominated Diphenyl Ethers (Deca BDE) are intentionally added to this product. This product therefore meets the relevant requirements of the following Directives or Regulations:

- 2011/65/EU and 2002/95/EC (RoHS)
- 2002/96/EC (WEEE)
- 2000/53/EC (ELV)
- 94/62/EC (Packaging Waste Directive)
- USA CONEG Regulation
- California Toxics in Packaging Prevention Act

Toys

This product complies with the requirements of ASTM F963 and EN 71-3 and EN71-9.

Phthalates

No phthalates, including di-(2-ethylhexyl) phthalate (DEHP), dibutyl phthalate (DBP), benzyl butyl phthalate (BBP), diisononyl phthalate (DINP), diisodecyl phthalate (DIDP), and di-n-octyl phthalate (DnOP), are intentionally added to this product. This product therefore meets the requirements of the Consumer Product Safety Improvement Act of 2008.

European Chemicals Agency (ECHA) Substances of Concern

This product does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA as of 19 December 2012. It also does not contain any substances on the REACH Annex XVII Restriction Substance list.

Canadian Environmental Protection Act (CEPA) "Challenge" Substances

This product does not contain any high priority chemical substances listed on the "Challenge" Substance Batches as issued by CEPA.

Absence of Substances and Chemicals

None of the following substances are used in the process nor are they expected to be part of the raw materials used to manufacture this product:

- Acrylamide
- Alkylphenol Ethoxylates, including nonylphenol ethoxylate and octylphenol ethoxylate
- Allergens, including but not limited to those listed in EU Directives 2000/13/EC and 2003/89/EC
- Aromatic amines
- Asbestos
- Azo compounds
- Bisphenol A

- Butylated Hydroxytoluene (BHT) and Butylated Hydroxyanisole (BHA)
- Colorants or pigments
- Conflict minerals, including Columbite-Tantalite, Cassiterite, Gold, or Wolframite
- Dioxins
- Epoxy derivatives listed in EU Directives 2002/16/EC and 1895/2005
- Fungicides, preservatives or fumigants
- Genetically-modified Organisms (GMOs)
- Materials derived from plants
- Melamine
- Methyl bromide
- Natural rubber latex and dry natural rubber
- Nonyl phenol
- Ozone-depleting chemicals
- Photointiators, including: 4-Methylbenzophenone, Benzophenone, and Isopropylthioxanthone
- Polyaromatic Hydrocarbons (PAHs)
- Polybrominated Diphenyl Ethers (PBDEs)
- Polychlorinated and Polybrominated Biphenyls (PCBs and PBBs)
- Polychlorinated and Polybrominated Terphenyls (PCTs and PBTs)
- Perfluoroctanoic Acid (PFOA) and Perfluorooctane Sulfonates (PFOS)
- Radioactive Substances
- Organo-Tin Compounds
- Tris-Nonylphenol Phosphite
- Vinyl Chloride Monomer (VCM) and Polyvinyl Chloride (PVC)

It is the responsibility of the customer to check compliance of the final articles with the relevant legislative and applicable regulatory requirements including their restrictions.

Disclaimer: *Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Chevron Phillips Chemical Company LP and Qatar Chemical Company Ltd do not make, and expressly disclaim, all warranties, including warranties of merchantability or fitness for a particular purpose, regardless of whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as federal, state or local laws which may be encountered in the use thereof. Such questions should be investigated by the user.*

Additional information on the health and safety aspects of our product is listed in the MSDS of the product.

Marlex® HXM 50100 Polyethylene

Version 1.3 Revision Date 2012-08-02

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

Product information

Trade name : Marlex® HXM 50100 Polyethylene
Material : 1070714, 1084474, 1093199, 1080384, 1086319, 1094603, 1018013, 1018017, 1025208, 1017207, 1017206, 1025207, 1018745, 1018746, 1018747, 1018748, 1018750, 1019312, 1019315, 1019314, 1019313, 1019852, 1019851, 1019310, 1019311, 1019847, 1019848, 1019849, 1019850, 1018749

EC-No.Registration number

Chemical Name	CAS-No. Index-No.	Legal Entity Registration number
Ethylene	74-85-1 601-010-00-3	Chevron Phillips Chemical Company LP 01-2119462827-27-0004
1-Hexene	592-41-6	Chevron Phillips Chemical Company LP 01-2119475505-34-0005
1-Hexene	592-41-6	Chevron Phillips Chemicals International NV Pre-registered

Company : Chevron Phillips Chemical Company LP
10001 Six Pines Drive
The Woodlands, TX 77380

Local : Chevron Phillips Chemicals International N.V.
Brusselsesteenweg 355
B-3090 Overijse
Belgium

MSDS Requests: (800) 852-5530
Technical Information: (832) 813-4862
Responsible Party: Product Safety Group
Email:msds@cpchem.com

Emergency telephone:

Health:
866.442.9628 (North America)
1.832.813.4984 (International)
Transport:
North America: CHEMTREC 800.424.9300 or 703.527.3887
Asia: +800 CHEMCALL (+800 2436 2255) China: 0532.8388.9090

EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)
Chemcare Asia: Tel: +65 6848 9048 - Mob: +65 8382 9188 - Fax: +65 6848 9013
South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group
E-mail address : MSDS@CPChem.com
Website : www.CPChem.com

SECTION 2: Hazards identification

Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

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

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

Label elements

Labeling (REGULATION (EC) No 1272/2008)

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

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous ingredients

Chemical Name	CAS-No. EINECS-No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [wt%]
Polyethylene Hexene Copolymer	25213-02-9			99 - 100
Contains no hazardous ingredients according to GHS. :				

EC-No.Registration number

Chemical Name	CAS-No. EINECS-No.	Registration number
Ethylene	74-85-1 200-815-3	Chevron Phillips Chemical Company LP 01-2119462827-27-0004
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 Pre-registered

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

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. 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 fire fighting 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.

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, NTP, IARC (2A), and OSHA have listed formaldehyde as a probable human carcinogen. Following all recommendations within this MSDS 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.

SECTION 8: Exposure controls/personal protection

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.

Protective 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.

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

Safety data

Melting point/range	: 90 - 140 °C (194 - 284 °F)
Density	: 0,91 - 0,97 g/cm3
Water solubility	: Negligible

SECTION 10: Stability and reactivity

Chemical stability : This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Possibility of hazardous reactions

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

SECTION 11: Toxicological information

Marlex® HXM 50100 Polyethylene
Acute oral toxicity : Presumed Not Toxic

Marlex® HXM 50100 Polyethylene
Acute inhalation toxicity : Presumed Not Toxic

Marlex® HXM 50100 Polyethylene
Acute dermal toxicity : Presumed Not Toxic

Marlex® HXM 50100 Polyethylene
Skin irritation : No skin irritation

Marlex® HXM 50100 Polyethylene
Eye irritation : No eye irritation

Marlex® HXM 50100 Polyethylene
Sensitization : Did not cause sensitization on laboratory animals.

Marlex® HXM 50100 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 probable human carcinogen by NTP, IARC (2A), and OSHA based on animal data and limited epidemiological evidence.

SECTION 12: Ecological information

Ecotoxicity effects

Elimination information (persistence and degradability)

Bioaccumulation : Does not bioaccumulate.

Mobility	:	The product is insoluble and floats on water.
Biodegradability	:	This material is not expected to be readily biodegradable.
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 MSDS pertains only to the product as shipped.

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

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 MSDS 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.

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

Major Accident Hazard Legislation : 96/82/EC Update: 2003
Directive 96/82/EC does not apply

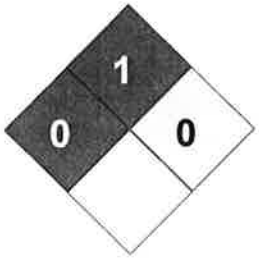
Water contaminating class (Germany) : nwg not water endangering

Notification status

Europe REACH	: On the inventory, or in compliance with the inventory
United States of America US.TSCA	: On the inventory, or in compliance with the inventory
Canada DSL	: On the inventory, or in compliance with the inventory
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



Further information

Legacy MSDS Number : 240370

Significant changes since the last version are highlighted in the margin. This version replaces all previous versions.

The information in this MSDS pertains only to the product as shipped.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Government Industrial Hygienists	LD50	Lethal Dose 50%
AICS	Australia, Inventory of Chemical Substances	LOAEL	Lowest Observed Adverse Effect Level
DSL	Canada, Domestic Substances List	NFPA	National Fire Protection Agency
NDSL	Canada, Non-Domestic Substances List	NIOSH	National Institute for Occupational Safety & Health
CNS	Central Nervous System	NTP	National Toxicology Program
CAS	Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemicals
EC50	Effective Concentration	NOAEL	No Observable Adverse Effect Level
EC50	Effective Concentration 50%	NOEC	No Observed Effect Concentration
EGEST	EOSCA Generic Exposure Scenario Tool	OSHA	Occupational Safety & Health Administration
EOSCA	European Oilfield Specialty Chemicals Association	PEL	Permissible Exposure Limit
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%		

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BE0830.843.503 IT 01510150194

شركة كيوكيم للتوزيع المحدودة
ص ب ٢٤٦٤٦
الدوحة - قطر
تلفون: ٤٤٨٤٧١١١ (٩٧٤)
فاكس: ٤٤٨٤٧١٧١ (٩٧٤)

CERTIFICATE OF ANALYSIS

DATE: 4-Aug-2013 SALES ORDER: 0000074849

TO WHOM IT MAY CONCERN

This is to certify that the following material manufactured by Qatar Chemical Company Ltd. meets all Quality specification.

PRODUCT: E1501000PP
MARLEX® POLYETHYLENE HXM 50100

LOT NO.: 22132527

TEST RESULTS

TEST	METHOD	RESULT	UNIT
Density@23°C	ASTM D-1505*	0.9477	g/cm3
HLMI (21.6 Kg)	ASTM D-1238*	8.9	g/10min

Akmal M. Rana

Dr. Akmal M. Rana
Laboratory Superintendent

Note: * Samples were tested to ASTM methods with the exception of sample conditioning.