

Product Name: HIGH DENSITY POLYETHYLENE - Grades not designated by HD or HDP prefix Revision Date: 04 Jan 2016 Page 1 of 14

SAFETY DATA SHEET

SECTION 1

IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

As of the revision date above, this (M)SDS meets the regulations in the United Kingdom & Ireland.

1.1. PRODUCT IDENTIFIER

Product Name:HIGH DENSITY POLYETHYLENE - Grades not designated by HD or HDP prefixProduct Description:HDPE without polymer processing aid, see Section 16 for applicable grades.

1.2. RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST Intended Use: Coatings, Extrusion and moulding, Film

Uses advised against: None unless specified elsewhere in this SDS.

1.3. DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET Supplier: ExxonMobil Petroleum & Chemical BV

ExxonMobil Petroleum & Chemical BVBA Polderdijkweg B-2030 Antwerpen Belgium Phone: 32 3 543 31 11

Local Contact:	ExxonMobil Chem	iical Ltd.
	MAILPOINT 88	
	CADLAND ROAD	
	HARDLEY, SOUTHAMPTO	N
	SO45 3NP HAMPSHIRE	
	Great Britain	
Supplier General Co	ntact:	+44 (0)23-8089-3822 / (0)23-8089-5297
E-Mail:		sds.uk@exxonmobil.com

1.4. EMERGENCY TELEPHONE NUMBER

24 Hour Environmental / Health Emergency Telephone:

+(44)-8708200418 (CHEMTREC)

SECTION 2

HAZARDS IDENTIFICATION

2.1. CLASSIFICATION OF SUBSTANCE OR MIXTURE

Classification according to Regulation (EC) No 1272/2008



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Not Classified

2.2. LABEL ELEMENTS

No Label elements according to Regulation (EC) No 1272/2008

Contains: ANTIOXIDANT May produce an allergic reaction.

2.3. OTHER HAZARDS

Physical / Chemical Hazards:

WARNING: May form combustible dust concentrations in air (during processing/handling). Thermal burn hazard - contact with hot material may cause thermal burns. Material can accumulate static charges which may cause an ignition. Spilled pellets present a slipping hazard on hard surfaces.

Health Hazards:

If dust is generated, it could scratch the eyes and cause minor irritation to the respiratory tract. When heated, the vapour/fumes given off may cause respiratory tract irritation.

Environmental Hazards:

No significant hazards. Material does not meet the criteria for PBT or vPvB in accordance with REACH Annex XIII.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1. SUBSTANCES Not Applicable. This material is regulated as a mixture.

3.2. MIXTURES

This material is defined as a mixture.

Reportable hazardous substance(s) complying with the classification criteria and/or with an exposure limit (OEL)

Name	CAS#	EC#	Registration#	Concentration*	GHS/CLP
					classification
Zinc oxide		215-222-5	01-2119463881- 32	< 0.25%	Aquatic Acute 1 H400 (M factor 1), Aquatic Chronic 1 H410 (M factor 1)
ANTIOXIDANT		247-759-6	NE	< 0.25%	Aquatic Acute 1 H400 (M factor 1), Aquatic Chronic 1 H410 (M factor 1), Skin Sens. 1 H317
UV STABILIZER			NE	< 1%	Acute Tox. 4 H332, Skin Irrit. 2 H315, Eye Dam. 1 H318, [Aquatic Acute 2 H401], Aquatic Chronic 2 H411



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Note - any classification in brackets is a GHS building block that was not adopted by the EU in the CLP regulation (No 1272/2008) and therefore is not applicable in the EU or in non-EU countries which have implemented the CLP regulation and is shown for informational purposes only.

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

NOTE: The product may contain varying levels of additives such as slip and anti-blocking agents, antioxidants and stabilisers.

Note: See (M)SDS Section 16 for full text of hazard statements.

SECTION 4 FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES

INHALATION

At ambient/normal handling temperatures, no adverse effects due to inhalation of dust are expected. In case of adverse exposure to vapours and / or aerosols formed at elevated temperatures, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest.

SKIN CONTACT

Wash contact areas with soap and water. For hot product: Immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.

EYE CONTACT

Flush thoroughly with water for at least 15 minutes. Get medical assistance.

INGESTION

No adverse effects due to ingestion are expected.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No important symptoms or effects.

4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

The need to have special means for providing specific and immediate medical treatment available in the workplace is not expected.

SECTION 5

FIRE FIGHTING MEASURES

5.1. EXTINGUISHING MEDIA

Suitable Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Unsuitable Extinguishing Media: Straight streams of water

5.2. SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE



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Hazardous Combustion Products: Flammable hydrocarbons, Incomplete combustion products, Oxides of carbon, Smoke, Fume

5.3. ADVICE FOR FIRE FIGHTERS

Fire Fighting Instructions: Assure an extended cooling down period to prevent re-ignition. Evacuate area. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply. Fire-fighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Unusual Fire Hazards: Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentration and in the presence of an ignition source is a potential dust explosion hazard.

FLAMMABILITY PROPERTIES

Flash Point [Method]: Not technically feasible

Upper/Lower Flammable Limits (Approximate volume % in air): UEL: No data available LEL: No data available

Autoignition Temperature: Not technically feasible

SECTION 6

ACCIDENTAL RELEASE MEASURES

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

PROTECTIVE MEASURES

Avoid contact with spilled material. 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 (for example, clearing dust surfaces with compressed air). Prevent dust exposure to ignition sources. For example, use non-sparking tools and prohibit smoking, flares, sparks or flames in immediate area. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for advice on the minimum requirements for personal protective equipment. Additional protective measures may be necessary, depending on the specific circumstances and/or the expert judgment of the emergency responders.

6.2. ENVIRONMENTAL PRECAUTIONS

Prevent entry into waterways, sewers, basements or confined areas. For Large Spills: Cover spill with plastic sheet or tarpaulin to minimise spreading.

6.3. METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Land Spill: Spilled pellets present a slipping hazard on hard surfaces. Prevent dust cloud. Small Dry Spills: With clean shovel, place material into clean, dry container and cover loosely; move containers from spill area.

Water Spill: Stop leak if you can do so without risk. Confine the spill immediately with booms. Warn other shipping. Skim from surface

Water spill and land spill recommendations are based on the most likely spill scenario for this material;



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however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

6.4. REFERENCES TO OTHER SECTIONS

See Sections 8 and 13.

SECTION 7

HANDLING AND STORAGE

7.1. PRECAUTIONS FOR SAFE HANDLING

Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dust from material can accumulate electrostatic charges due to friction from transfer and mixing operations and cause an electrical spark (ignition source). Provide adequate precautions to ignition sources, such as electrical grounding and bonding, inert atmosphere or non-sparking tools. However, bonding and grounds may not eliminate the hazard for static accumulation. Consult local applicable standards for guidance. Refer to NFPA 654. Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids and EN 61241, Electrical Apparatus for Use in the Presence of Combustible Dust for safe handling. Avoid elevated temperatures for prolonged periods of time. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent small spills and leakage to avoid slip hazard. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Care should be taken when storing and handling this product. Apart from the specific nature of the polymer product, conditions such as humidity, sunlight and temperature have an influence on the way the product behaves during storage and handling. Special attention should be paid to avoid inappropriate stacking of palletised bags or other package units. Indeed, polymer products may be dimensionally unstable under certain conditions. Avoid conditions generating heat during transfer operations.

Loading/Unloading Temperature: [Ambient]

Transport Temperature: [Ambient] Transport Pressure: [Ambient]

Static Accumulator: This material is a static accumulator.

7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

The container choice, for example storage vessel, may effect static accumulation and dissipation. Store in a cool, dry place with adequate ventilation. Keep away from incompatible materials, open flames and high temperatures. Do not store in open or unlabelled containers.
Storage Temperature: [Ambient]
Storage Pressure: [Ambient]

Suitable Containers/Packing: Bulk Containers; Hopper Cars; Bags; Boxes; Drums; Octatainer; Silos Suitable Materials and Coatings (Chemical Compatibility): Aluminium; Polyethylene Bags

7.3. SPECIFIC END USES

Section 1 informs about identified end-uses. No industrial or sector specific guidance available.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

EXPOSURE LIMIT VALUES



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Substance Name	Form	Limit/Sta	ndard	Note	Source
POLYETHYLENE	Inhalable dust.	TWA	10 mg/m3		UK EH40
POLYETHYLENE	Respirab le dust.	TWA	4 mg/m3		UK EH40
Zinc oxide	Respirab le fraction.	STEL	10 mg/m3		ACGIH
Zinc oxide	Respirab le fraction.	TWA	2 mg/m3		ACGIH

Exposure limits/standards (Note: Exposure limits are not additive)

Exposure limits/standards for materials that can be formed when handling this product: For dusty conditions, ACGIH recommends for insoluble and poorly soluble particles not otherwise specified an 8-hour TWA of 10 mg/m3 (inhalable particles), 3 mg/m3 (respirable particles). Product may also contain varying levels of additives, such as slip and antiblocking agents (talc or silica), antioxidants, stabilizers, and corrosion inhibitors. Certain grades may contain cristobalite, a form of crystalline silica, as an additive that is encapsulated in the polymer. Inhaled crystalline silica in an occupational environment is recognized as a known human carcinogen. However, the potential for release of silica to the air when this polymer is handled has been assessed and the encapsulated silica within the polymer is not expected to pose a health hazard when processed under normal conditions of use.

Note: Information about recommended monitoring procedures can be obtained from the relevant agency(ies)/institute(s): UK

Health and Safety Executive (HSE)

8.2. EXPOSURE CONTROLS

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded. SPECIAL PRECAUTIONS: Should significant vapours/fumes be generated during thermal processing of this product, it is recommended that work stations be monitored for the presence of thermal degradation by-products which may evolve at elevated temperatures (for example, oxygenated components). Processors of this product should assure that adequate ventilation or other controls are used to control



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exposure. It is recommended that the current ACGIH-TLVs for thermal degradation by-products be observed. Contact your local sales representative for further information. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product are designed and maintained to minimize dust generation and accumulation. Ensure that dust-handling systems (such as exhaust ducts, dusts collectors, vessels, and processing equipment) are designed to minimize the potential for dust ignition and prevent explosion propagation. For example, use explosion relief vents, an explosion suppression system or inert equipment internals. Additional examples of proper equipment include using only appropriately classified electrical equipment and powered industrial trucks.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

Particulate air-purifying respirator approved for dust or oil mist is recommended. European Committee for Standardization (CEN) standards EN 136, 140 and 405 provide respirator masks and EN 149 and 143 provide filter recommendations.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapour warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If product is hot, thermally protective, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves. CEN standards EN 420 and EN 374 provide general requirements and lists of glove types.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:

If product is hot, thermally protective, chemical resistant apron and long sleeves are recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

Comply with applicable environmental regulations limiting discharge to air, water and



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soil. Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.

9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Form: Pellet, Granule, Powder Colour: Clear to Opaque, White to Off-White Odour: None to Mild Odour Threshold: Not technically feasible pH: Not technically feasible Melting Point: 120°C (248°F) - 140°C (284°F) [In-house method] Freezing Point: No data available Initial Boiling Point / and Boiling Range: Not technically feasible Flash Point [Method]: Not technically feasible Evaporation Rate (n-butyl acetate = 1): Not technically feasible Flammability (Solid, Gas): Not technically feasible Upper/Lower Flammable Limits (Approximate volume % in air): UEL: No data available LEL: No data available Vapour Pressure: [Negligible] [In-house method] Vapour Density (Air = 1): Not technically feasible Relative Density: 0.94 - 0.97 [In-house method] Solubility(ies): water Nealiaible Partition coefficient (n-Octanol/Water Partition Coefficient): Not technically feasible Autoignition Temperature: Not technically feasible No data available Decomposition Temperature: Viscosity: Not technically feasible Explosive Properties: None **Oxidizing Properties:** None

9.2. OTHER INFORMATION

Bulk Density: 0.4 g/cc at 20 °C - 1 g/cc at 20 °C [In-house method] Molecular Weight: > 25000 Hygroscopic: No

SECTION 10

STABILITY AND REACTIVITY

10.1. REACTIVITY: See sub-sections below.

10.2. CHEMICAL STABILITY: Material is stable under normal conditions.



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10.3. POSSIBILITY OF HAZARDOUS REACTIONS: Hazardous polymerization will not occur.

10.4. CONDITIONS TO AVOID: Avoid elevated temperatures for prolonged periods of time.

10.5. INCOMPATIBLE MATERIALS: Strong oxidisers

10.6. HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.

SECTION 11

TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Hazard Class	Conclusion / Remarks
Inhalation	
Acute Toxicity: No end point data for material	Minimally Toxic. Based on chemical structure (polymers).
Irritation: No end point data for material.	Negligible hazard at ambient/normal handling temperatures.
Ingestion	
Acute Toxicity: No end point data for	Minimally Toxic. Based on chemical structure (polymers).
material.	
Skin	
Acute Toxicity: No end point data for material.	Minimally Toxic. Based on chemical structure (polymers).
Skin Corrosion/Irritation: No end point data for material.	Negligible irritation to skin at ambient temperatures. Based on chemical structure (polymers).
Eye	
Serious Eye Damage/Irritation: No end point data for material.	May cause mild, short-lasting discomfort to eyes. Based on chemical structure (polymers).
Sensitisation	
Respiratory Sensitization: No end point data for material.	Not expected to be a respiratory sensitizer.
Skin Sensitization: No end point data for material.	Not expected to be a skin sensitizer. Based on chemical structure (polymers).
Aspiration: No end point data for material.	Not expected to be an aspiration hazard. Based on physico-chemical properties of the material.
Germ Cell Mutagenicity: No end point data for material.	Not expected to be a germ cell mutagen. Based on chemical structure (polymers).
Carcinogenicity: No end point data for material.	Not expected to cause cancer. Based on chemical structure (polymers).
Reproductive Toxicity: No end point data for material.	Not expected to be a reproductive toxicant. Based on chemical structure (polymers).
Lactation: No end point data for material.	Not expected to cause harm to breast-fed children.
Specific Target Organ Toxicity (STOT)	
Single Exposure: No end point data for material.	Not expected to cause organ damage from a single exposure.
Repeated Exposure: No end point data for material.	Not expected to cause organ damage from prolonged or repeated exposure. Based on chemical structure (polymers).

OTHER INFORMATION

For the product itself:



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Dust may be irritating to the eyes and respiratory tract.

Elevated temperatures or mechanical action may form vapours, mists or fumes which may be irritating to the eyes and respiratory tract.

Contains:

Additives that are encapsulated in the polymer. Under the normal conditions for processing and use of this polymer the encapsulated additives are not expected to pose any health hazard. However, grinding of the polymer is not recommended without the use of appropriate measures to control exposure (see Section 8 - Engineering Controls).

SECTION 12

ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

12.1. TOXICITY

Material -- Not expected to be harmful to aquatic organisms. Material -- Not expected to be harmful to terrestrial organisms.

12.2. PERSISTENCE AND DEGRADABILITY

Biodegradation:

Material -- Expected to be persistent.

Hydrolysis:

Material -- Transformation due to hydrolysis not expected to be significant.

Photolysis:

Material -- Transformation due to photolysis not expected to be significant.

Atmospheric Oxidation:

Material -- Transformation due to atmospheric oxidation not expected to be significant.

12.3. BIOACCUMULATIVE POTENTIAL

Material -- Potential to bioaccumulate is low.

12.4. MOBILITY IN SOIL

Material -- Low solubility and floats and is expected to migrate from water to the land. Expected to partition to sediment and wastewater solids.

12.5. PERSISTENCE, BIOACCUMULATION AND TOXICITY FOR SUBSTANCE(S)

This product is not, or does not contain, a substance that is a PBT or a vPvB.

12.6. OTHER ADVERSE EFFECTS

No adverse effects are expected.

DISPOSAL CONSIDERATIONS



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Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

13.1. WASTE TREATMENT METHODS

Suitable routes of disposal are supervised incineration, preferentially with energy recovery, or appropriate recycling methods in accordance with applicable regulations and material characteristics at the time of disposal.

REGULATORY DISPOSAL INFORMATION

European Waste Code: 07 02 13

NOTE: These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste producers need to assess the actual process used when generating the waste and its contaminants in order to assign the proper waste disposal code(s).

SECTION 14 TRANSPORT INFORMATION

LAND (ADR/RID): 14.1-14.6 Not Regulated for Land Transport

INLAND WATERWAYS (ADNR/ADN): 14.1-14.6 Not Regulated for Inland Waterways Transport

SEA (IMDG): 14.1-14.6 Not Regulated for Sea Transport according to IMDG-Code

SEA (MARPOL 73/78 Convention - Annex II):

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not classified according to Annex II

AIR (IATA): 14.1-14.6 Not Regulated for Air Transport

SECTION 15 REGULATORY INFORMATION

REGULATORY STATUS AND APPLICABLE LAWS AND REGULATIONS

Listed or exempt from listing/notification on the following chemical inventories: TSCA

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

Applicable EU Directives and Regulations:



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1907/2006 [... on the Registration, Evaluation, Authorisation and Restriction of Chemicals ... and amendments thereto] 1272/2008 [on classification, labelling and packaging of substances and mixtures.. and amendments thereto]

Contact Sales / Marketing group for complete chemical inventory listing applicable to product.

15.2. CHEMICAL SAFETY ASSESSMENT

REACH Information: A Chemical Safety Assessment has been carried out for one or more substances present in the material.

SECTION 16

OTHER INFORMATION

REFERENCES: Sources of information used in preparing this SDS included one or more of the following: results from in house or supplier toxicology studies, CONCAWE Product Dossiers, publications from other trade associations, such as the EU Hydrocarbon Solvents REACH Consortium, U.S. HPV Program Robust Summaries, the EU IUCLID Data Base, U.S. NTP publications, and other sources, as appropriate.

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety data sheet: Acronym Full text

N/A	Not applicable
N/D	Not determined
NE	Not established
VOC	Volatile Organic Compound
AICS	Australian Inventory of Chemical Substances
AIHA WEEL	American Industrial Hygiene Association Workplace Environmental Exposure Limits
ASTM	ASTM International, originally known as the American Society for Testing and Materials (ASTM)
DSL	Domestic Substance List (Canada)
EINECS	European Inventory of Existing Commercial Substances
ELINCS	European List of Notified Chemical Substances
ENCS	Existing and new Chemical Substances (Japanese inventory)
IECSC	Inventory of Existing Chemical Substances in China
KECI	Korean Existing Chemicals Inventory
NDSL	Non-Domestic Substances List (Canada)
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances
TLV	Threshold Limit Value (American Conference of Governmental Industrial Hygienists)
TSCA	Toxic Substances Control Act (U.S. inventory)
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
LC	Lethal Concentration
LD	Lethal Dose
LL	Lethal Loading
EC	Effective Concentration



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EL	Effective Loading
NOEC	No Observable Effect Concentration
NOELR	No Observable Effect Loading Rate

KEY TO THE H-CODES CONTAINED IN SECTION 3 OF THIS DOCUMENT (for information only):

Skin Irrit. 2 H315: Causes skin irritation; Skin Corr/Irritation, Cat 2

Skin Sens. 1 H317: May cause allergic skin reaction; Skin Sensitization, Cat 1

Eye Dam. 1 H318: Causes serious eye damage; Serious Eye Damage/Irr, Cat 1

Acute Tox. 4 H332: Harmful if inhaled; Acute Tox Inh, Cat 4

Aquatic Acute 1 H400: Very toxic to aquatic life; Acute Env Tox, Cat 1

[Aquatic Acute 2 H401]: Toxic to aquatic life; Acute Env Tox, Cat 2

Aquatic Chronic 1 H410: Very toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 1

Aquatic Chronic 2 H411: Toxic to aquatic life with long lasting effects; Chronic Env Tox, Cat 2

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

Revision Changes:

Section 04: First Aid Skin information was modified.

Section 04: First Aid Eye information was modified.

Section 01: Company Mailing Address information was modified.

Section 01: Company Mailing Address information was modified.

Section 05: Hazardous Combustion Products information was modified.

Section 08: Eye Protection information was modified.

Hazard Identification: Physical/Chemical Hazard information was modified.

Section 15: REACH Chemical Safety Assessment statement information was modified.

Section 07: Handling and Storage - Specific Use - Header information was modified.

Section 11: Aspiration Test Data information was modified.

Section 09: Relative Density information was modified.

Section 09: Vapour Pressure information was modified.

Section 09: Melting Point C(F) information was modified.

Section 09: Flammability (Solid, Gas) information was modified.

Section 09: Bulk Density information was modified.

Composition: Concentration Footnote information was added.

Section 02: GHS Sensitizer Statement - Header information was added.

Section 02: GHS Sensitizer Statement information was added.

Section 02: GHS Sensitizer Statement information was added.

Composition: Footnotes information was added.

Composition: Component Table for REACH information was added.

Composition: Symbol/Risk Phrase Header information was added.

Composition: Substance or Complex Substance Name information was added.

Composition: CAS Number information was added.

Composition: EC Number - Header information was added.

Composition: EU REACH Registration Number information was added.

Composition: Concentration - Header information was added.

Hazard Identification: Section 3 Footnotes for CLP tables information was added.

Composition: Substances Table(s) - Header - Disclosure information was added.

Section 16: HCode Key information was added.

Section 16: HCode Key - Header information was added.

Section 08: Exposure Limit Values - Header information was added.

Section 08: OEL Table - Form Column - Header information was added.

Section 08: OEL Table - Limit Column - Header information was added.



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Section 08: OEL Table - Notation Column - Header information was added.
Section 08: OEL Table - Source Column - Header information was added.
Section 08: OEL Table - Substance Name Column - Header information was added.
Section 08: Exposure Limits Table information was added.
Section 08: Exposure Limit Values - Header information was added.
Section 15: Section 15 Footnotes information was added.
Section 15: Section 15 Footnotes information was deleted.
Section 01: Company Mailing Address - Former Name information was deleted.
Composition: No components information was deleted.
Section 15: Section 15 CLP Footnotes information was deleted.
Hazard Identification: EU - Hazards Statement - CLP information was deleted.
Article 31 statement information was deleted.

THIS SDS COVERS THE FOLLOWING MATERIALS: High Density PE grades not designated by HD or HDP prefix| HCE 004 | HDA 020 | HDZ 261 | HDZ 263 | HMA 014 | HMA 016 | HMA 018 | HMA 024 | HMA025 | HMA 035 | HMG707 | HPA 020 | HTA 001HD | HTA 001HP2 | HTA 002 | HTA 108 | HTX108 | HTX001HP2 | HTX001HP3 | HTX001HP4 | HW 6000.01 | HW 8000.02 | HW0001.17 | HYA010 | HYA 021 | HYA 022 | HYA 201 | HYA 301 | HYA 302 | HYA 600 | HYA 800 | HYE 028 |HYX 802 | LW 8000.02 | NEXXSTAR 02565 | NX 02565 | SYA 024 | SYA 026 | SYA 301 | SYA 480XHD 480 | XHE 472 | XHE 480 | XHE 481 | XHE 482 | XHE 483 | ZZZ 001 | ZZZ 003 | ZZZ 004

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ANNEX

Annex not required for this material.