DUPONT™ LDPE1541 resin

Version 2.0

Revision Date 05/13/2015 Ref. 130000031373

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	DUPONT™ LDPE1541 resin
Product Use	:	Polymer
Restrictions on use	:	For manufacturing and research use only
Manufacturer/Supplier	:	DuPont 974 Centre Road Wilmington, DE 19805, USA
Product Information	:	1-800-441-7515 (outside the U.S. 1-302-774-1000)
Medical Emergency	:	1-800-441-3637 (outside the U.S. 1-302-774-1139)
Transport Emergency	:	CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)

SECTION 2. HAZARDS IDENTIFICATION

Product hazard category

Combustible dust

Label content

Pictogram	:	not required
Signal word	:	Warning
Hazardous warnings	:	May form combustible dust concentrations in air.
Hazardous prevention measures	:	not required

Other hazards

If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.

Processing temperatures that exceed those described in Section 10 (Conditions to Avoid), may evolve fumes irritating the eyes, nose and throat., Exposure may result in reddening, tears and itching of the eyes and soreness in the nose and throat, together with coughing.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard 2012.

SECTION 4. FIRST AID MEASURES

General advice	:	No applicable data available.
Inhalation	:	Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Skin contact	:	The material is not likely to be hazardous by skin contact, but cleaning the skin after use is advisable. Cool skin rapidly with cold water after contact with molten material. Do not attempt to remove material from the skin. Obtain medical treatment for thermal burn. Wash contaminated clothing before reuse.
Eye contact	:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Ingestion	:	Not a probable route of exposure. However, in case of accidental ingestion, call a physician.
Most important symptoms/effects, acute and delayed	:	No applicable data available.
Protection of first-aiders	:	No applicable data available.
Notes to physician	:	No applicable data available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	Water, Foam, Dry chemical, Carbon dioxide (CO2)
Unsuitable extinguishing media	:	No applicable data available.
Specific hazards	:	Material in pellet form may accumulate static charge when poured from one container to another. Molten polyethylene tends to flow or drip and will propagate fire. Hazardous combustion products Alcohols Aldehydes Carbon monoxide, Nitrogen Oxide, Organic Acid 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. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, do not permit dust to accumulate.
Special protective equipment for firefighters	:	Wear self-contained breathing apparatus and protective suit.
Further information	:	The solid polymer can only be burned with difficulty. Evacuate personnel and keep upwind of fire. Grounding and elimination of the static charge is recommended.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel)	:	Spilled material is a slipping hazard.
Environmental precautions	:	Do not discharge to streams, ponds, lakes or sewers.
Spill Cleanup	:	Shovel or sweep up. Spills of fine material should be cleaned using gentle sweeping or vacuuming. Cleaning methods (e.g. compressed air) which can generate potentially combustible dust clouds should not be used.

Accidental Release Measures : No applicable data available.

SECTION 7. HANDLING AND STORAGE

Handling (Personnel) : Before using, read the Product Data Sheet.
Pneumatic conveying and other mechanical handling operations can generate combustible dust. Avoid significant deposits of material which may become airborne and form combustible dust clouds. Handling and processing operations should be conducted in accordance with best practices (e.g.NFPA-654).

Handling (Physical Aspects) : No applicable data available.

Dust explosion class : No applicable data available.

Storage : Store in a cool, dry place. Keep container closed to prevent contamination.

Storage period : No applicable data available.

Storage temperature : No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : Use sufficient ventilation to keep employee exposure below recommended limits. When hot processing this material, use local and/or general exhaust ventilation to maintain the concentration of vapors and fumes below exposure limits. Local exhaust ventilation is preferred. Use static controls. Static charges can cause explosions in solvent and dust laden atmospheres. See Bulletin "Proper Use of Local Exhaust Ventilation During Processing of Plastics". Follow processing recommendations on the product data sheet.

Personal protective equipment

Respiratory protection : A respiratory protection program that meets country requirements must be followed whenever workplace conditions warrant respirator use. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.
Consult the OSHA respiratory protection information located at 29CFR 1910.134.

Hand protection : Additional protection: Protective gloves

Eye protection : Wear safety glasses with side shields. Wear tightly fitting chemical splash goggles and face shield when possibility exists for eye and face contact due

to spattering or splashing of molten material.

Skin and body protection : If there is a potential for contact with hot/molten material wear heat resistant clothing and footwear.

Exposure Guidelines

Exposure Limit Values

This product does not contain any exposure limits that require disclosure according to OSHA Hazard Communication Standard 2012.

Non-Constituent(s)

Dust (inhalable and respirable fraction)

Permissible exposure limit:	(OSHA)	5 mg/m3	8 hr. TWA	Respirable fraction.
Permissible exposure limit:	(OSHA)	15 mg/m3	8 hr. TWA	Total dust.
TLV	(ACGIH)	3 mg/m3	TWA	Respirable particles.
TLV	(ACGIH)	10 mg/m3	TWA	Inhalable particles.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state : solid

Form : pellets

Color : clear

Odor : mild, hydrocarbon-like

Odor threshold : No applicable data available.

pH : Not applicable

Melting point/range : No applicable data available.

Boiling point/boiling range	:	Boiling point/boiling range Not applicable
Flash point	:	341 - 365 °C Method: ASTM D 1929
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	May form combustible dust concentrations in air.
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Vapor pressure	:	Not applicable
Vapor density	:	Not applicable
Specific gravity (Relative density)	:	No applicable data available.
Water solubility	:	negligible
Solubility(ies)	:	No applicable data available.
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	No applicable data available.
Decomposition temperature	:	>335 °C Thermal decomposition of the resin accelerates above temperature listed. Decomposition can occur below the recommended processing temperature limit. Decomposition is a function of both processing temperature and time at that temperature.
Viscosity, kinematic	:	Not applicable
Viscosity, dynamic	:	Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No applicable data available.
Chemical stability	:	Stable at normal temperatures and storage conditions.
Possibility of hazardous reactions	:	Polymerization will not occur.
Conditions to avoid	:	Temperature > 335 °C (> 635 °F) Decomposes on heating. At temperatures above the "conditions to avoid" temperature, thermal decomposition of the resin accelerates. Decomposition can occur below the recommended processing temperature limit. Decomposition is a function of both processing temperature and time at that temperature.
Incompatible materials	:	Strong bases and, Oxidizing agents
Hazardous decomposition products	:	Hazardous decomposition products may include:, Carbon monoxide, Organic acids, Aldehydes, Alcohols, Acrolein, Formaldehyde, acetaldehydes

SECTION 11. TOXICOLOGICAL INFORMATION

DUPONT™ LDPE1541 resin

Further information : No data is available on the product itself.The substance is a polymer and is not expected to produce toxic effects.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information : No data is available on the product itself. Toxicity is expected to be low based on insolubility in water.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product	:	Preferred options for disposal are recycling, incineration with energy recovery, and landfill. The high fuel value of this product makes incineration very desirable for material that cannot be recycled. Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.
Contaminated packaging	:	No applicable data available.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

HSNO (NZ) Status	:	Exempt
TSCA	:	In compliance with TSCA Inventory requirements for commercial purposes.
SARA 313 Regulated Chemical(s)	:	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.
PA Right to Know Regulated Chemical(s)	:	Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances): None known.
NJ Right to Know Regulated Chemical(s)	:	Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): None known.
California Prop. 65	:	Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

SECTION 16. OTHER INFORMATION

Restrictions for use : Do not use DuPont materials in medical applications involving implantation in the human body or contact with internal body fluids or tissues unless the material has been provided from DuPont under a written contract that is consistent with DuPont policy regarding medical applications and expressly acknowledges the contemplated use. For further information, please contact your DuPont representative. You may also request a copy of the DuPont POLICY Regarding Medical Applications and DuPont CAUTION Regarding Medical Applications.

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Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

Revision Date : 05/13/2015

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.

Significant change from previous version is denoted with a double bar.

DUPONT™ LDPE1541 resin

Warning

Hazard statements: May form combustible dust concentrations in air.
Supplemental information: If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air. Processing temperatures that exceed those described in Section 10 (Conditions to Avoid), may evolve fumes irritating the eyes, nose and throat. Exposure may result in reddening, tears and itching of the eyes and soreness in the nose and throat, together with coughing.

Refer to Safety Data Sheet (SDS) for further information.

DuPont
974 Centre Road, Wilmington, DE 19805, USA

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Report version: 2.0 05/13/2015 Ref. 130000031373 LBL_US_GHS

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