

## SAFETY DATA SHEET

### According to Regulation (EC) No 1907/2006 and 453/2010 (REACH)

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#### 1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

<b>Trademark:</b>	SABIC® LLDPE
<b>Product Name:</b>	RG50035 - 00900
<b>Product Description:</b>	Poly (ethylene-1-butene) [CASRN 25087-34-7]
<b>Product Type:</b>	Commercial Product
<b>Recommended use:</b>	May be used to produce molded or extruded articles or as a component of other industrial products.
<b>Company:</b>	SABIC SALES Europe B.V. or any of its Affiliates Europaboulevard 1, 6135 LD SITTARD P.O. Box 5151, 6130 PD SITTARD The Netherlands
<b>Manufacturer:</b>	SABIC P.O. Box 5101 Riyadh 11422 Saudi Arabia
<b>Emergency Telephone Number:</b>	SITTARD +31 (0)46 476 55 55 (0h - 24h)
<b>E-mail:</b>	sds.info@sabic.com
<b>Website Address:</b>	<a href="http://www.sabic.com">www.sabic.com</a>

## 2. HAZARDS IDENTIFICATION

The additives in this product (if any) are bound in a thermoplastic resin matrix. In accordance with GHS for the classification of the product, the hazard potential may be assessed with respect to the physico-chemical form and/or bioavailability of the individual components in the thermoplastic resin.

Where GHS classifications are shown below, these are based on the individual components in the thermoplastic resin matrix. Under the typical use conditions for the resin, these hazardous components are unlikely to contribute to workplace exposure. Please read the entire safety data sheet and/or consult an EHS professional for a complete understanding.

Classification of the substance or mixture

### REGULATION (EC) No 1272/2008

**Not hazardous** Not classified

### **Classification according to EU Directives 67/548/EEC or 1999/45/EC**

### CLP/GHS-Labeling

GHS Labeling not required

### Precautionary Statements

No GHS specific Precautionary Statements required - observe all other warnings and handling instructions in this SDS.

Other hazards which do not result in classification:

### SABIC Emergency Overview

- Powder with slight or no odor
- WARNING! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING)
- Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air.
- Spilled material may create slipping hazard
- Can burn in a fire creating dense, toxic smoke
- Molten plastic can cause severe thermal burns
- Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills, and fever. See below for additional effects.
- Powder can cause mechanical irritation if dusts are generated.

### **Other Information:**

Cool skin rapidly with cold water after contact with molten material. Heating can release hazardous gases. Hazardous fumes can also occur in post-processing operations.

### **Processing Issues:**

Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation ductwork, molds, and other surfaces can cause irritation and injury to skin.

### **Aggravated Medical Conditions:**

**MEDICAL RESTRICTIONS:** There are no known health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Product Type** Mixture

For the full text of the H-phrases, if mentioned in this section, see Section 16.

The non-hazardous components and exact percentage (concentration) of the composition have been withheld as a trade secret.

This product consists primarily of high molecular weight polymers which are not expected to be hazardous. The ingredients in this product are present within the polymer matrix and are not expected to be hazardous.

### 4. FIRST AID MEASURES

**If Inhalation:** Move to fresh air in case of accidental inhalation of fumes from overheating or combustion  
If symptoms persist, call a physician

**On skin contact:** Immediately cool the skin by rinsing with cold water after contact with hot material Wash off immediately with soap and plenty of water Consult a physician

**On contact with eyes:** Immediately flush eyes with plenty of water for at least 15 minutes retracting eyelids often  
Tilt the head to prevent chemical from transferring to the uncontaminated eye Get immediate medical attention if symptoms of burning, pain, and/or vision impairment remain  
After initial flushing, remove any contact lenses

**On ingestion:** No hazards which require special first aid measures

**Precautions:** Cool molten product on skin with plenty of water. Do not remove solidified product Do not peel polymer from the skin

## 5. FIRE-FIGHTING MEASURES

**Autoignition Temperature:** >300°C

**Explosive Limits**  
**upper:** Not determined

**lower:** Not determined

**Explosive Properties:** Avoid generating and accumulating dusts; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Material is not sensitive to mechanical impact

**Suitable Extinguishing Media:** Use dry chemical, CO<sub>2</sub>, water spray or "alcohol" foam. Water is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition on larger resin fires (blobs, drools, etc.)

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire for Safety Reasons:

**Hazardous Decomposition Products:** Fire will produce dense black smoke containing hazardous combustion products, carbon oxides.

**Hazards from Combustion Products:** Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments.

**Special Protective Equipment for Firefighters:** In the event of fire, wear self-contained breathing apparatus (EU: NEN-EN137)

**Specific Hazards:** Take precautionary measures against static discharges. During processing, dust may form explosive mixture in air. Thermal decomposition can lead to release of irritating gases and vapors

## 6. ACCIDENTAL RELEASE MEASURES

**Clean up:** Use appropriate tools to gather spilled material into suitable containers for disposal while avoiding airborne dust. Dust deposits should not be allowed to accumulate on surfaces, as these may form 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). Use non-sparking tools and equipment.

**Personal Precautions:** See section 8. If spilled, take caution, as material can cause surfaces to become very slippery.

**Environmental Precautions:** Do not flush into surface water or sanitary sewer system. Material should not be released into the environment.

## 7. HANDLING AND STORAGE

**Handling:** Handle in accordance with good industrial hygiene and safety practices. Provide for appropriate exhaust ventilation and dust collection at machinery. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

**Storage:** Store in a dry and cool area. Keep away from heat sources and sources of ignition. Keep away from direct sunlight.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure limits:** No components with information, unless noted below

\*SABIC Recommended Exposure Limits have been established for certain chemicals.

**Engineering Measures to Exposure:** Handle in accordance with good industrial hygiene and safety practice. Provide for appropriate exhaust ventilation at machinery. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks. In the case of hazardous fumes, wear self-contained breathing apparatus. Wear face-shield and protective suit for abnormal processing problems. Processing fume condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, ductwork, and other surfaces using appropriate personal protection.

**Hand Protection:** Protective gloves should be worn. (EU: NEN-EN 374). When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molton resin.

**Eye Protection:** Safety glasses with side-shields. (EU: NEN-EN 165-166).

**Respiratory Protection:** In the case of hazardous fumes, wear self contained breathing apparatus. In case of insufficient ventilation wear suitable respiratory equipment. (EU: NEN-EN149). When using this product at elevated temperatures, implement engineering systems, administrative controls or a respiratory protection program (including a respirator approved for protection from organic vapors, acid, gases, and particulate matter) if processing vapors are not adequately controlled or operators experience symptoms of overexposure. Use a respirator approved for protection from dust.

**Body Protection:** Long sleeved clothing. (EU: NEN-EN 340-369-465).

**Hygiene Measures:** When using, do not eat, drink or smoke.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Solid
<b>Appearance:</b>	Powder
<b>Color:</b>	Same as color code
<b>Odor:</b>	Characteristic
<b>Boiling point/range:</b>	decomposition starting from 300°C
<b>Melting point/range:</b>	115-135°C
<b>Autoignition Temperature:</b>	>300°C
<b>Vapor Pressure:</b>	Negligible
<b>Density:</b>	0.91-0.94 g/cm <sup>3</sup>
<b>Water Solubility:</b>	Insoluble
<b>Evaporation Rate:</b>	Negligible
<b>VOC content (%):</b>	Negligible
<b>Explosive Limits</b>	
<b>upper:</b>	Not determined
<b>lower:</b>	Not determined

## 10. STABILITY AND REACTIVITY

<b>Stability:</b>	Stable under ambient conditions. Hazardous polymerization does not occur.
<b>Conditions to Avoid:</b>	Avoid temperatures above 300°C. Heating can result in the formation of gaseous decomposition products, some of which may be hazardous. Do not exceed melt temperature recommendations in product literature. Purgings of hot material should be collected in small, flat, thin shapes and quenched with water to allow for rapid cooling. Do not allow product to remain in barrel at elevated temperatures for extended periods of time.
<b>Hazardous Decomposition Products:</b>	Process vapors under recommended processing conditions may include trace levels of hydrocarbons, carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

<b>LD50/oral/rat:</b>	>5000 mg/kg
<b>LD50/dermal/rabbit:</b>	>2000 mg/kg
<b>Subchronic Toxicity:</b>	No information available
<b>Primary Irritation:</b>	Substance does not generally irritate and is only mildly irritating to the skin
<b>Remarks:</b>	The toxicological data has been taken from products of similar composition
<b>Special Studies:</b>	No Information

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity Effects:**

Ecological damages are not known or expected under normal use. Small particles can have an effect on water and soil organisms.

**Other information:**

none.

## 13. DISPOSAL CONSIDERATIONS

**Waste from residues / unused products:** Where possible recycling is preferred to disposal or incineration. Dispose of in accordance with local regulations.

**Contaminated Packaging:** Empty containers should be transported/delivered using a registered waste carrier for local recycling or waste disposal.

**EWC waste disposal no:** 702 - waste from the manufacture, formulation, supply and use of plastics, synthetic rubber and man-made fibres.

## 14. TRANSPORT INFORMATION

**Transport Classification:** Not regulated as hazardous for shipment, unless noted below, under current transportation guidelines.

DOT

ADR/RID/ADN

IMDG

ICAO

IATA-DGR

## 15. REGULATORY INFORMATION

Further regulatory information can be requested via your local sales office.

### International Inventories:

TSCA (USA):	Listed
DSL (Canada):	Listed
ENCS (Japan):	Listed
IECSC (China):	Listed
KECL (Korea):	Listed
PICCS (Philippines):	Listed
AICS (Australia):	Listed
NZIoC (New Zealand):	Listed
REACH Information:	For this product's REACH related information, please contact sds.info@sabic.com

### Other Inventory Information:

A "Listed" entry above means all chemical components are on the respective inventory list and/or a qualifying exemption exists for one or more components. A "Not listed" entry above indicates one or more components is restricted from import or manufacture into that country/region. Articles are exempt from registration and are therefore not listed on the national chemical inventories.

### HMIS Rating

Health: 0

Flammability: 1

Reactivity: 0

## 16. OTHER INFORMATION

### **Literary Reference:**

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.

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### **SDS Scope:**

Europe: Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 453/2010. This document is also applicable in other countries and regions.

**Prepared by:** Product Stewardship & Toxicology

**DISCLAIMER:** The information contained in the Safety Data Sheet is at the date of its issuance to the best of our knowledge correct according to the data available to us. The information is meant as a guideline for safe use, handling, disposal, storage and transport of products and does not imply any warranty (not implied nor explicitly) or specification. The Supplier shall to the extent permitted by law not be liable for any error or incorrectness in the information contained in this Safety Data Sheet. The information relates exclusively to the specified products, which may not be suitable for combination with other materials or use in processes other than those specifically described here.

**End of Safety Data Sheet**