

# Safety Data Sheet(SDS)

According to Regulation (EC) No. 2020/878

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

**1.1 Product identifier** : LLDPE SP980 25KG BAG PP

Other means of identification :

PCN No. :

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses : 29.Polymer preparations and compounds

Uses advised against :

**1.3 Details of the supplier of the safety data sheet**

Name : LG Chem, Ltd.

Address : 54, Dokgot 1-ro, Daesan-eup, Seosan-si, Chungcheongnam-do, Republic of Korea

Telephone number : 82-41-661-2628

Fax number :

Email : kwonks@lgchem.com

**1.4 Emergency telephone number**

Emergency telephone number : +49-69-710-455-138 Customer Solution Center Europe

Opening hours : 09:00~17:00 (CET, Central European Time)

Other comments(e.g. language(s) of the phone : English, Deutsch, Korean available.

## SECTION 2: Hazards identification

**2.1 Classification of the substance or mixture according to Regulation (EC) No 1272/2008**

No need for classification according to GHS criteria for this product

**2.2 Label elements**

**Hazard pictogram**

The product does not require a hazard warning label in accordance with GHS criteria.

**Signal word**

- NONE

**Hazard statements**

Not required

**Precautionary statements**

Not required

**2.3 Other hazards**

- According to Annex XIII, the substance does not meet PBT or vPvB criteria.
- According to Regulation(EU) 2017/2100 and 2018/605, the substance does not affect to endocrine system.
- The substance is not listed in Article 59
- No other hazards have been identified

The criteria for vPvB and PBT according to Regulation (EC) No 1907/2006, Annex XIII

Substance identified as having endocrine disrupting properties according to Regulation (EU) 2017/2100

**SECTION 3. Composition/information on ingredients****3.1. Substances**

Not applicable

**3.2 . Mixtures**

Substance name	CAS No.	Classification	SCL	ATE	PCT(wt %)
	EC No. EU REACH No.		M-Factor		
Ethylene-1-hexene copolymer	25213-02-9	No data available	No data available	No data available	99-100
			No data available		
Secret substance		No data available	No data available	Acute toxicity(Oral) : 1500mg/kg	0-1
			No data available		

※ Classification : Classification according Regulation(EC) No. 1272[CLP]

SCL : Specific concentration limit

M-factor : The multiplication factor

ATE : The acute toxicity estimate

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### ○4.1.1 Following eye contact

- Get medical aid immediately.

- In case of contact with material, immediately flush eyes with running water for at least 15 minutes.

#### ○4.1.2 Following skin contact

- Get medical aid immediately.

- In case of contact with material, immediately flush skin with running water for at least 15 minutes.

- Launder contaminated clothing and shoes before re-use.

- Remove and isolate contaminated clothing and shoes.

#### ○4.1.3 Following inhalation

- Administer oxygen if breathing is difficult.

- Give artificial respiration if victim is not breathing.

- Move to fresh air.

- Seek immediate medical assistance.

#### ○4.1.4 Following ingestion

- Get medical aid immediately.

- If unconscious but breathing, never give anything by mouth.

### 4.2 Most important symptoms and effects, both acute and delayed

- No data available

### 4.3 Indication of any immediate medical attention and special treatment needed

- Do not apply drugs of the adrenaline ephedrine group.

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### ○Suitable extinguishing media

- Large fire: Water spray/fog, regular foam (Suitable extinguishing media).

- Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO<sub>2</sub> (Suitable extinguishing media).

#### ○Unsuitable extinguishing media

- High-pressure water (Unsuitable extinguishing media).

### 5.2 Special hazards arising from the substance or mixture (Hazardous combustion products)

- No data available

### 5.3 Advice for firefighters

- Dike fire-control water for later disposal; do not scatter the material.

- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Move containers from fire area if you can do it without risk.
- Runoff may cause pollution.
- Substance may be transported hot.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

##### ○Emergency procedures

- Removal of ignition sources, provision of sufficient ventilation.

##### ○Protective equipment

- The wearing of suitable protective equipment to prevent any contamination of skin, eyes and personal clothing.

#### 6.1.2 For emergency responders

- No data available

### 6.2 Environmental precautions

- Prevent entry into waterways, sewers, basements or confined areas.

### 6.3 Methods and material for containment and cleaning up

#### 6.3.1 For containment

- Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

#### 6.3.2 For cleaning up

- Clear spills immediately.

- Don't use a brush or compressed air for cleaning surfaces or clothing.

#### 6.3.3 Other information

- No data available

### 6.4 Reference to other sections

- Section 8 (protective equipment), section 13 (disposal instructions)

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

- CAUTION: High temperature.
- Caution: Dangerous fire hazard when exposed to heat, or flame, sparks.
- Handling refer to engineering control/personal protection section.
- Please note that materials and conditions to be avoided.
- Use adequate machine for prevention when package handling.
- Wash ... thoroughly after handling.
- Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection

section.)

### 7.2 Conditions for safe storage, including any incompatibilities

- Choose a place that can be protected from strong oxidizers and acid.
- Drum Handling: Must work at safe place., Loading more than 3 stack is prohibited.
- Store containers: AVOID the place where can be damage and contamination.
- Store in a cool/low-temperature, well-ventilated {dry} place {away from heat and ignition sources}

### 7.3 Specific end uses

- See section 1 for recommended use.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Components	Occupational exposure	ACGIH regulations	Biological limit values	DNEL/DMEL	PNEC-Values
Ethylene-1-hexene copolymer	TWA : Not applicable	TWA : Not applicable	No data available	Not applicable	Not applicable
	STEL : Not applicable	STEL : Not applicable			
Secret substance	TWA : Not applicable	TWA : Not applicable	No data available	Not applicable	Not applicable
	STEL : Not applicable	STEL : Not applicable			

### 8.2 Exposure controls

#### 8.2.1 Appropriate engineering controls

- No data available

#### 8.2.2 Individual protection measures, such as personal protective equipment

- Eye/face protection
  - No data available
- Respiratory protection
  - No data available
- Skin protection
  - (i) Hand protection
    - No data available
  - (ii) Other
    - No data available
- Thermal hazards
  - Wear a protective gloves/protective clothes/security diameter/security surface/earplugs.

#### 8.2.3 Environmental exposure controls

- Ensure not to cause environmental pollution by discharging into rivers or other waterways.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Solid	
Relative Vapour density	No data available	
Density/Relative density	No data available	
Kinematic viscosity	No data available	

Decomposition temperature	No data available	
Auto ignition temperature	No data available	
Partition coefficient(n-octanol/water)	No data available	
Solubility	No data available	
Vapour pressure	No data available	
Upper/lower flammability or explosive limits	No data available	
Flammability(solid, gas)	No data available	
Flash point	No data available	
Initial boiling point and boiling range	No data available	
Melting point/freezing point	No data available	
pH	No data available	
Odour	No data available	
Colour	No data available	
Particle characteristics	No data available	

## 9.2 Other information

### 9.2.1 Information with regard to physical hazard classes

No data available

### 9.2.2 Other safety characteristics

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

- Containers may explode when heated.
- Fire may produce irritating and/or toxic gases.
- May cause toxic effects if inhaled.
- Some may burn but none ignite readily.
- Stable under normal temperatures and pressures.

### 10.2 Chemical stability

- No data available

### 10.3 Possibility of hazardous reactions

- No data available

### 10.4 Conditions to avoid

- No data available

### 10.5 Incompatible materials

- No data available

## 10.6 Hazardous decomposition products

- No data available

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### ○Acute toxicity

##### ●Acute toxicity(Oral) > PRODUCT : Not classified

- Secret substance : LD50 1500 mg / kg experimental species: Rat
- Ethylene-1-hexene copolymer : No data available

##### ●Acute toxicity(Dermal) > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

##### ●Acute toxicity(Inhalation:Gases) > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

##### ●Acute toxicity(Inhalation:Vapours) > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

##### ●Acute toxicity(Inhalation:Dust/mist) > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

#### ○Skin corrosion/ irritation > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

#### ○Serious eye damage/ irritation > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

#### ○Respiratory or skin sensitisation > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

#### ○Skin sensitization > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

#### ○Carcinogenicity > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available
- Germ cell mutagenicity > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available
- Reproductive toxicity > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available
- Specific target organ toxicity (single exposure) > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available
- Specific target organ toxicity (repeated exposure) > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available
- Aspiration hazard > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

## 11.2. Information on other hazards

### ○11.2.1. Endocrine disrupting properties

- Secret substance : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.
- Ethylene-1-hexene copolymer : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

### ○11.2.2. Other information

- Secret substance : No other hazards have been identified
- Ethylene-1-hexene copolymer : No other hazards have been identified

## SECTION 12: Ecological information

### 12.1 Toxicity

- Fish > PRODUCT : Not classified
  - Secret substance : LC50 21.910 mg / ℓ, Source: ECOSAR
  - Ethylene-1-hexene copolymer : No data available
- Crustaceans > PRODUCT : Not classified
  - Secret substance : LC50 13.969 mg / ℓ 48 hr Other (Daphnid), Source: ECOSAR

- Ethylene-1-hexene copolymer : No data available
- Aquatic Algae > PRODUCT : Not classified
  - Secret substance : EC50 36.063 mg / l 96 hr other (green algae), Source: ECOSAR
- Ethylene-1-hexene copolymer : No data available

## 12.2 Persistence and degradability

- Persistence > PRODUCT : Not classified
  - Secret substance : 17.17 log Kow ((estimated))
  - Ethylene-1-hexene copolymer : (Not applicable)
- Degradability > PRODUCT : Not classified
  - Secret substance : No data available
  - Ethylene-1-hexene copolymer : No data available
- Biodegradation > PRODUCT : Not classified
  - Secret substance : No data available
  - Ethylene-1-hexene copolymer : No data available

## 12.3 Bioaccumulative potential > PRODUCT : Not classified

- Secret substance : 3.162, Source: EPIWIN
- Ethylene-1-hexene copolymer : No data available

## 12.4 Mobility in soil > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

## 12.5 Results of PBT and vPvB assessment

- Secret substance : NOT\_APPLICABLE
- Ethylene-1-hexene copolymer : NOT\_APPLICABLE

## 12.6 Endocrine disrupting properties

- Secret substance : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.
- Ethylene-1-hexene copolymer : According to Regulation(EU) 2017/2100 and 2018/605, the substance not affects to endocrine system.

## 12.7 Other adverse effects > PRODUCT : Not classified

- Secret substance : No data available
- Ethylene-1-hexene copolymer : No data available

# SECTION 13: Disposal considerations

## 13.1 Waste treatment methods

- ### 13.1.1 Product / Packaging disposal
- Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste codes / waste designations according to LoW

- No data available

- ### 13.1.2 Waste treatment-relevant information
- Disposal according to local regulations.

- ### 13.1.3 Sewage disposal-relevant information
- Disposal according to local regulations and avoid release to the environment.

- 13.1.4 Other disposal recommendations  
- No data available.

## SECTION 14: Transport information

- 14.1 UN number or ID number : Not applicable
- 14.2 UN proper shipping name : Not applicable
- 14.3 Transport hazard class(es) : Not applicable
- 14.4 Packing group : Not applicable
- 14.5 Environmental hazards : Not applicable
- 14.6 Special precaution for user
- Emergency measures in case of fire : Not applicable
- Emergency measures in the effluent : Not applicable
- 14.7 Maritime transport in bulk according to IMO instruments
- ADR
- Tunnel restriction code : Not applicable
- IMDG
- Marine pollutant : Not applicable
- Air transport(IATA)
- UN No. : Not applicable
  - Proper shipping name : Not applicable
  - Class or division : Not applicable
  - Packing group : Not applicable

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- ETC regulation - EU. Chemicals & Articles Subject to Export Ban: Annex V (Art. 15), Regulation 649/2012/EU, as amended by Regulation 2022/643, OJ L 118, 20 April 2022  
- Not applicable
- ETC regulation - EU. Directive 2012/18/EU on major accident hazards involving dangerous substances, Annex I, OJ (L 197)1, 24 July 2012  
- Not applicable
- ETC regulation - EU. F-Gases Subject to Emission Limits/Reporting (Annexes I, II), Regulation 517/2014/EU on FGGs, 20 May 2014  
- Not applicable
- ETC regulation - EU. GHS Classification. CLP Regulation (EC) No 1272/2008, Annex VI, Table 3, Harmonized List of Hazardous Substances, as amended by Regulation (EU) 2022/692, OJ L 129, 3 May 2022  
- Not applicable
- ETC regulation - EU. Polluting Substances: Annex II, Directive 2010/75/EU on Industrial Emissions (IPPC), 17 December 2010  
- Not applicable

- ETC regulation - EU. REACH, Annex XIV, Substances Subject to Authorization (Authorization List), as amended through Regulation (EU) 2022/586, 11 April 2022
  - Not applicable
- ETC regulation - EU. REACH, Annex XVII, Restrictions on manufacture, placing on the market and use of certain dangerous substances, 1907/2006/EC, as amended by Reg 2021/2030/EU, 22 Nov 2021
  - Not applicable
- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex I, Controlled Substances (L286, Vol. 52, 31 October 2009)
  - Not applicable
- ETC regulation - EU. Regulation 1005/2009/EC on substances that deplete the ozone layer, Annex II, New Substances (L286, Vol. 52, 31 October 2009)
  - Not applicable
- ETC regulation - EU. Regulation 2019/1021/EU on persistent organic pollutants (POPs) (recast), 25 June 2019, as amended by Regulation 2021/277, 23 February 2021
  - Not applicable
- Global Inventory - EU. European Inventory of Existing Commercial Chemical Substances (EINECS)
  - Secret substance

## 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has been carried out.

## SECTION 16: Other information

### 16.1 Key literature references and sources for data

- Ciba-Geigy
- International Uniform Chemical Information Database(IUCLID)(<http://ecb.jrc.it/esis>)
- Ministry of Environment Existing Chemical Safety Test
- OECD Screening Information Data Set(<http://cs3-hq.oecd.org/scripts/hpv/>)
- QSAR
- Quantitative Structure Activity Relation(QSAR)
- SIDS
- e-ChemPortal;HPVIS
- ECHA
- ECHA Registered substances
- ECHA registration data
- ECOSAR
- EPISUITE
- EPIWIN
- EU CLP
- IUCLID

16.2 Issuing date : 2023-02-01

### 16.3 Indication of changes

**Revision number** : 1

**Revision date** : 2023-02-01

**Revision history** : Update due to revision of EU regulation

#### **16.4 Abbreviations and acronyms**