

Last revised date : 2021-09-28

Safety Data Sheet(SDS)

1. Identification of the substance/mixture and of the company/undertaking

- 1) Product identifier : LLD UF1001DM 25KG BAG (PE)
- 2) Relevant identified uses of the substance or mixture and uses advised against
 - Relevant identified uses
 - 1.Feed materials, Intermediates
 - Uses advised against

3) Supplier information

○ Company name [Manufacture]

Company : LGC Yeosu Plant

Address : 535, Sandanjungang-ro, Yeosu-si, Jeollanam-do, Republic of Korea/ 1121, Yeosusandan-ro, Yeosu-si, Jeollanam-do, Republic of Korea

Emergency number : +82 061-805-5827

2. HAZARD IDENTIFICATION

1) Hazard classification

Not applicable

2) Allocation label elements

Hazard pictograms

- NONE

Hazard statements

No data available

Precautionary statements

Not applicable

3) Other hazards

- Product NFPA Level : Health = 0, Flammability = 0, Reactivity = 0

(0 = Insufficient , 1 = Slightly , 2 = ordinary , 3 = Highness , 4 = Very high)

Chemical Name	Health	Flammability	Reactivity
1-Butene polymer with ethene	0	0	0
Additives			

3. Composition/Information on ingredients

Components	Common name	CAS No.	PCT(wt%)
1-Butene polymer with ethene	1-Butene polymer with ethene	25087-34-7	99~100
Additives			<1

4. FIRST AID MEASURES

- Following eye contact
 - Get medical aid immediately.
 - In case of contact with material, immediately flush eyes with running water for at least 15 minutes.
- Following skin contact
 - Get medical aid immediately.
 - Laundry contaminated clothing and shoes before re-use.
 - Remove and isolate contaminated clothing and shoes.
 - In case of contact with material, immediately flush skin with running water for at least 15 minutes.
- Following inhalation
 - Seek immediate medical assistance.
 - Administer oxygen if breathing is difficult.
 - Give artificial respiration if victim is not breathing.
 - Move to fresh air.
- Following ingestion
 - Get medical aid immediately.
 - If unconscious but breathing, never give anything by mouth.
- Advice to physician
 - Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. FIRE FIGHTING MEASURES

- Suitable (and unsuitable) extinguishing media
 - Suitable extinguishing media
 - Small fire: Dry sand, dry chemical, alcohol-resistant foam, water spray, regular foam, CO2 (Suitable extinguishing media).
 - Unsuitable extinguishing media
 - High-pressure water (Unsuitable extinguishing media).

2) Special hazards arising from the substance or mixture

- ☐ Pyrolytic product
 - No data available
- ☐ Risk of fire and explosion
 - Some may burn but none ignite readily.
- ☐ Other
 - May cause toxic effects if inhaled.

3) Special protective equipment for firefighters

- Fire involving Tanks: ALWAYS stay away from tanks engulfed in fire.
- Fire involving Tanks: Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks: Cool containers with flooding quantities of water until well after fire is out.
- Move containers from fire area if you can do it without risk.
- Dike fire-control water for later disposal; do not scatter the material.
- Contact may cause burns to skin and eyes.
- Runoff may cause pollution.
- Substance may be transported hot.

6. ACCIDENTAL RELEASE MEASURES

1) Health considerations and protective equipment

- Do not enter areas which have more than 23.5% oxygen in the atmosphere, without respirator or air supplied mask.
- Prevent dust cloud.
- Do not touch or walk through spilled material.
- Ventilate the contaminated area.
- Please note that materials and conditions to be avoided.
- Stop leak if you can do it without risk.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

2) Environmental precautions

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

3) For cleaning up

- Small Spill: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.

7. HANDLING AND STORAGE

1) Precautions for safe handling

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

2) Conditions for safe storage (including any incompatibilities)

- Store in a cool/low-temperature, well-ventilated {dry} place {away from heat and ignition sources}
- Store containers: AVOID the place where can be damage and contamination.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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+852-6957-5415 (HongKong)

1) Chemical exposure limits, Biological exposure standard

Components	Occupational exposure limits	ACGIH	Biological standard
1-Butene polymer with ethene	Not applicable	Not applicable	Not applicable

Components	Occupational exposure limits	ACGIH	Biological standard
Additives	Not applicable	Not applicable	Not applicable

2) Appropriate engineering controls

- Not applicable

3) Personal protection equipment

☐ Respiratory protection

- If high frequency of use or exposure, wear air respirator.
- Wear breathing protection, which needs a confirmation from the Korea Occupational Safety and Health Agency.

☐ Eye protection

- Wear suitable protective goggles and face shields.

☐ Hand protection

- Wear suitable protective gloves.

☐ Body protection

- Wear suitable protective clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Soild (Pellet)
Physical state	solid
Colour	Translucent white
Odour	Odorless
Odour threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability(solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Solubility(ies)	No data available
Vapour density	No data available
Relative density	0.910~0.938

n-octanol/water partition coefficient	N
Auto ignition temperature	330~410℃
Decomposition temperature	No data available
Viscosity	No data available
Molecular weight(mass)	100,000~500,000

10. STABILITY AND REACTIVITY

- 1) Stability and hazardous reactivity
 - May cause toxic effects if inhaled.
 - Some may burn but none ignite readily.
 - Stable under normal temperatures and pressures.
- 2) Conditions to avoid
 - Ignition source(heat, spark, flame, etc.).
- 3) Incompatible materials
 - Irritating and/or toxic gas.
 - Combustibles.
- 4) Hazardous decomposition products
 - No data available

11. TOXICOLOGICAL INFORMATION

- 1) Exposure route information
 - ☐ Inhalation
 - After inhalation: No data
 - ☐ Skin Contact
 - Following skin contact: No data
 - ☐ Eye Contact
 - After eye contact: No data
 - ☐ Ingestion
 - After ingestion: No data
- 2) Health hazard information
 - ☐ Acute toxicity
 - Acute toxicity(Oral) PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
 - Acute toxicity(Dermal) PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
 - Acute toxicity(Inhalation:Gases) PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
 - Acute toxicity(Inhalation:Vapours) PRODUCT : Not classified

- 1-Butene polymer with ethene : No data available
- Additives : No data available
- Acute toxicity(Inhalation:Dust/mist) PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Skin corrosion/irritation PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Serious eye damage/eye irritation PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Respiratory sensitization PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Skin sensitization PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Carcinogenicity PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Germ cell mutagenicity PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Reproductive toxicity PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Specific target organ toxicity single exposure PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Specific target organ toxicity repeated exposure PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available
- Aspiration hazard PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available

12. ECOLOGICAL INFORMATION

1) Aquatic toxicity

- Fish>PRODUCT : Not classified
 - 1-Butene polymer with ethene : No data available
 - Additives : No data available

- Crustacea>PRODUCT : Not classified

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- 1-Butene polymer with ethene : No data available
- Additives : No data available

- Aquatic algae>PRODUCT : Not classified

- 1-Butene polymer with ethene : No data available
- Additives : No data available

2) Persistence and degradation

- n-octanol water partition coefficient>PRODUCT : Not classified

- 1-Butene polymer with ethene : (None)
- Additives : No data available

- Degradation>PRODUCT : Not classified

- 1-Butene polymer with ethene : No data available
- Additives : No data available

- Biodegradation>PRODUCT : Not classified

- 1-Butene polymer with ethene : No data available
- Additives : No data available

3) Bioaccumulative potential>PRODUCT : Not classified

- 1-Butene polymer with ethene : No data available
- Additives : No data available

4) Mobility in soil>PRODUCT : Not classified

- 1-Butene polymer with ethene : No data available
- Additives : No data available

5) Other adverse effects>PRODUCT : Not classified

- 1-Butene polymer with ethene : No data available
- Additives : No data available

13. DISPOSAL CONSIDERATIONS

1) Disposal methods

Every commercial waste producer shall either treat wastes generated from his/her place of business by him/herself or commission the treatment of such wastes to a person who has license for a waste treatment business under Article 26(3), a person who recycles of such wastes under Article 44(2), a person who has installed and operates a waste disposal facility under Article 4 or 5, a person who has completed the registration of a business of discharging wastes into the sea under Article 18 of the Marine Environment Management Act.

2) Precautions (including disposal of contaminated container of package)

Empty containers recycled under environmental laws.

Do not allow spill material to enter sewers, storm water drains, soil, etc.

Wear an appropriate Personal protection. (See Exposure Controls/Personal Protection section.)

14. TRANSPORT INFORMATION

1) UN No. : Not applicable

2) Proper shipping name : Not applicable

3) Class or division : Not applicable

4) Packing group : Not applicable

5) Marine pollutant : Not applicable

6) Special safety response for transportation of

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Emergency measures in case of fire : Not applicable

Emergency measures in the effluent : Not applicable

- 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

15. REGULATORY INFORMATION

● Global Inventory – USA. Toxic Substances Control Act (TSCA) Chemical Substances Inventory (12 April 2018)

– 1-Butene polymer with ethene

● Other regulations – EPCRA (SARA Title III) Section 302 Extremely Hazardous Substance (EHS) (40 CFR 355, Appendix A)

Not applicable

● Other regulations – OSHA Hazard Communication Standard: On One of the Floor Lists of the OSHA HCS (29 CFR 1910.1200)

Not applicable

● Other regulations – EPCRA (SARA Title III) Section 313 Toxic Chemical Release Inventory (TRI) Reporting for RY 2013 (as amended Sep. 30, 2014)

Not applicable

● Other regulations – CERCLA Hazardous Substances [other than radionuclides] (40 CFR 302.4) (as amended by 75 FR 78918, Dec. 17, 2010)

Not applicable

● Other regulations – RCRA Appendix VII: Hazardous Wastes (40 CFR 261, App. VII, Basis for Listing Hazardous Waste)

Not applicable

● Other regulations – CERCLA. Radionuclides and their Reportable Quantities (40 CFR 302.4, App. B)

Not applicable

● Other regulations – RCRA D List of Characteristic Hazardous Wastes (40 CFR 261.21–24)

Not applicable

● Other regulations – RCRA F List of Hazardous Wastes from Non-Specific Sources (40 CFR 261.31(a)) (as amended by 73 FR 31756, June 4, 2008)

Not applicable

● Other regulations – RCRA K List of Hazardous Wastes from Specific Sources (40 CFR 261.32)

Not applicable

- Other regulations – RCRA P List of Hazardous Wastes (40 CFR 261.33(f) and 40 CFR 302 [CERCLA]) and 40 CFR 302 [CERCLA])

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Not applicable

- Other regulations – RCRA U List of Hazardous Wastes (40 CFR 261.33(f) and 40 CFR 302 [CERCLA], as amended 75 FR 78918, Dec 17, 2010

Not applicable

- Other regulations – DOT Hazardous Materials Table Listings (49 CFR 172.101, as amended through October 31, 2013)

Not applicable

- Other regulations – EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Respo

Not applicable

16. OTHER INFORMATION

1) Reference

- EPA
- OSHA

2) Print date : 2021-09-28

3) Revision date

- Revised date count : 0
- Last revised date : 2021-09-28
- Last revised history :

4) Other