

Product Safety Sheet

The document drafted on a voluntary basis is not required under Article 31 of Regulation (EC) No 1907/2006 and subsequent amendments

Version number 2

Revision: 16.01.2026

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

1.1 Product identifier

Trade name:	DUTRAL K TER
Registration number	Not applicable
Chemical name	Ethylene propylene-diene terpolymer (EPDM)
Synonyms	DUTRAL K TER 2045, 4033, 4038(EP), 4039, 4044, 4047, 4049, 7040, 9046

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

Application of the substance / the mixture	Production of various rubber final applications.
Uses advised against	Not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier	LOTTE VERSALIS ELASTOMERS Co., Ltd. 51, Lotte Tower, Boramae-ro 5-gil, Dongjak-gu, 07071, Korea Phone: +82 61 690 2510
E-mail address of the competent person responsible for the SDS:	SDS.LVE@lvelastomers.com

1.4 Emergency telephone number

+82 61 690 2510

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	Based on the requirements of the CLP Regulation, the product is not classified
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2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008	Not applicable
Hazard pictograms	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable

2.3 Other hazards

Results of PBT and vPvB assessment PBT:	This substance / mixture is not a PBT applying the criteria of REACH Regulation, Annex XIII.
vPvB:	This substance / mixture is not a vPvB applying the criteria of REACH Regulation, Annex XIII.
Determination of endocrine-disrupting properties	The mixture does not contain one or more substances with endocrine-disrupting properties at a concentration of 0.1% or more.

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3. Composition/information on ingredients

3.2 Mixture

Description: Mixture, composed of a terpolymer and of substances below the applicable classification limits or not hazardous.

Chemical Name	Cas No.	Contents
Ethylene propylene-diene terpolymer	25038-36-2	100%

Dangerous components Not applicable

4. First aid measures

4.1 Description of first aid measures

General information: No special measures required.

After inhalation: Dust or gas/vapours released by heat: move the affected person away from the contaminated area into fresh air; seek medical assistance.

After skin contact: In case of contact with melted material, cool down with cold water and seek medical assistance. Do not remove the product that solidified on skin. Treat as a burn.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: No specific measure requested in case of ingestion. If needed seek medical assistance.

4.2 Most important symptoms and effects, both acute and delayed

Dust or gas/vapours released by heat may cause respiratory irritation and eye reddening.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Water, water spray, foam, dry chemicals, carbon dioxide.

For safety reasons unsuitable extinguishing agents: Not applicable

5.2 Special hazards arising from the substance or mixture

During combustion, carbon dioxide, carbon monoxide (in oxygen-deficient conditions), and incompletely burned hydrocarbons may be generated.

Overheating/pyrolysis may evolve vapours made up of monomers, low molecular weight polymers and their oxidation products.

5.3 Advice for firefighters

Protective equipment: Wear suitable protective clothing (helmet, goggles, fire resistant gloves, boots) and protect respiratory organs (self-contained breathing apparatus).

Additional information: Cool endangered receptacles with water spray.

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6. Accidental release measures

6.1 Personal precautions, protect equipment and emergency procedures

For non-emergency

No special measures are required under normal conditions; ensure adequate ventilation of the spillage area.

For emergency

Do not attempt to take action without suitable protective equipment. For further information refer to section 8.

6.2 Environmental precautions

Not special measures required; however, avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Collect mechanically. Reuse if possible or dispose of as required by national and local regulations.

6.4 Reference to other sections

For further information refer to section 13

7. Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling

During the processing of the product, avoid inhalation of fumes or powders, by providing good ventilation of the workroom and, if necessary, by a suitable exhaust system. If required, wear appropriate personal protect equipment.

Information about fire - and explosion protection:

The product is a poor conductor and it is likely to accumulate Electrostatic charges. Precautions normally used for not conductive materials and against the accumulation of electrostatic charges should be used during processes which employ powdered materials or produce dust (e.g.: reduce speed to the minimum, install earthing systems, the absolute prohibition to smoke and use free flames, use inert gases in mills and in the closed systems).

Hygiene measures

Do not eat, drink or smoke when using this product. Always wash hands after handling the product

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep only in the original container in a cool, well-ventilated place, away from heat sources, and store at $\leq 35^{\circ}\text{C}$
Keep out of direct sunlight.

7.3 Specific end use(s)

No further relevant information available.

8. Exposure controls/personal protection

8.1 Control parameters

Ingredient with limit values that require monitoring at the work place

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Appropriate engineering controls
General protective and hygienic measures

No further data; see section 7.
Traces of monomers and other volatile substances may be given off during processing, particularly at unusually high processing temperatures. Work rooms must be provided with adequate ventilation and exhaust equipment to collect dust and gas/vapours that may be evolved during the conversion.

Suitable technical controls

Ensure good ventilation / exhaust at the workplace.

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Personal protection measures	The personal protective equipment will vary according to the possible exposure and danger of working conditions.
Respiratory protection	In normal conditions masks with dust filters should be available for use when requested.
Protection of skin	
- Hand protection	Protective gloves.
- Eye/face protection	In case of dust production: protective goggles.
- Other:	Standard work clothes.
- Thermal dangers	No information available
- Environmental exposure controls	No information available

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Solid
Form	Bales
Colour	From clear to greenish gray.
Odour	Characteristic.
Odour threshold	Not determined.
Melting point/freezing point	Undetermined.
Boiling point or initial boiling point and boiling range	Undetermined.
Flammability	Not determined.
Lower explosion limit	Not determined.
Upper explosion limit	Not determined.
Flash point:	Not applicable.
Ignition temperature:	>330°C
Decomposition temperature:	Not determined.
pH	Not applicable.
Viscosity (kinematic/dynamic)	Not applicable.
Solubility	Insoluble in water
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not applicable.
Density at 20 °C:	0.86-0.89 g/cm³
Relative density	Not determined.
Vapour density	Not applicable.
Relative gas density	Not applicable.
Particle characteristics	Not applicable.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Not applicable; Product does not present an explosion hazard.

9.2.2 Other safety characteristics

No additional information available

10. stability and reactivity

10.1 Reactivity

The product does not participate to dangerous reactions if stored and handled as prescribed/indicated.

10.2 Chemical stability

Thermal decomposition

Observe the recommended processing temperatures.
The product is stable and inert in the recommended storage and handling conditions(see section 7).

10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4 Conditions to avoid

Exposure to sunlight and/or heat. Build-up of electrostatic charges.

10.5 Incompatible materials

Avoid the contact with oxidizing substances.

10.6 Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

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

Acute toxicity(oral/dermal/inhalation)

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

The product's dust may cause irritation of eyes.

Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional toxicological information:

The product does not present any intrinsic health hazard when processed according to correct working procedures.

Specific information on the product is not available in the literature.

Residual monomers may be present in the product at trace levels, hindered in the polymer matrix and therefore not available in normal conditions.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No evidence of these effects has been reported.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

The mixture does not contain one or more substances with endocrine-disrupting properties at a concentration of 0.1% or more.

11.2.2 Other information

Not determined.

12. Ecological information

12.1 Toxicity

The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

12.2 Persistence and degradability

The product is a non-biodegradable polymer.

12.3 Bioaccumulative potential

Does not accumulate in organisms.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

PBT:

This substance / mixture is not a PBT applying the criteria of REACH Regulation, Annex XIII.

vPvB:

This substance / mixture is not a vPvB applying the criteria of REACH Regulation, Annex XIII.

12.6 Endocrine disrupting properties

This mixture contains no substances with endocrine disrupting properties as per REACH Article 59(1), Regulation (EU) 2017/2100, or Regulation (EU) 2018/605 at concentrations $\geq 0.1\%$

12.7 Other adverse effects

No additional information available.

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13. Disposal considerations

13.1 Waste treatment methods

Recommendation

The same safety considerations that apply to the product as it is, apply to scraps/waste as well.

Residues should be disposed of as required by national and local regulations. The incineration must be done under approved conditions, possibly with energy recovery and only at suitable facilities equipped with a scrubber for the treatment of fumes before their release into the atmosphere.

Landfilling should be avoided as far as possible. If unavoidable, use approved landfill sites.

Uncleaned packaging

- Recommendation:

- Recommended cleansing agents:

Disposal must be made according to official regulations.

Not applicable.

14. Transport information

14.1 UN number or ID number

ADR, IMDG, IATA, ADN, RID

Not applicable

14.2 Transport hazard class(es)

ADR, IMDG, IATA, ADN, RID

Not applicable

14.3 UN proper shipping name

ADR, IMDG, IATA, ADN, RID

Not applicable

14.4 Packing group

ADR, IMDG, IATA, ADN, RID

Not applicable

14.5 Environmental hazards

Marine pollutant

No

14.6 Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7 Maritime transport in bulk according to IMO Instruments

Not applicable

15. Regulatory information

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

15.1.1 EU Regulations

REACH Annex XVII (Restriction List)

None of the ingredients is listed.

REACH Annex XIV (Authorisation List)

None of the ingredients is listed.

REACH Candidate List (SVHC)

None of the ingredients is listed.

PIC Regulation (Prior Informed Consent)

None of the ingredients is listed.

POP Regulation (Persistent Organic Pollutants)

None of the ingredients is listed.

2011/65/EU Annex II, amended 2015/863 (RoHS)

None of the ingredients is listed.

Ozone Regulation (1005/2009)

None of the ingredients is listed.

Explosives Precursors Regulation (2019/1148)

None of the ingredients is listed.

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Drug Precursors Regulation (273/2004)	None of the ingredients is listed.
15.1.2 National regulations	Not applicable
15.2 Chemical safety assessment	Assessment is not required.

16. Other information

Department issuing SDS	Planning/IMS
Date of previous version	21.10.2021
Version number of previous version	1
Data compared to the previous version	Altered.
Abbreviations and acronyms	<p>ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road; ATE: Acute Toxicity Estimate; BCF: Bioconcentration factor; BCF: Bioconcentration factor BLV: Biological limit value; BOD: Biochemical oxygen demand CAS-No.: Chemical Abstracts Service number; COD: Chemical oxygen demand; DMEL: Derived Minimal Effect Level; DNEL: Derived No-Effect Level; EC-No.: European Community number; ED: Endocrine disrupting properties; EN: European Standard; IARC: International Agency for Research on Cancer; IATA: International Air Transport Association; IMDG: International Maritime Dangerous Goods; LC50: Median lethal concentration; LD50: Median lethal dose; LOAEL: Lowest Observed Adverse Effect Level; NOAEC: No-Observed Adverse Effect Concentration; NOAEL: No-Observed Adverse Effect Level; NOEC: No-Observed Effect Concentration; N.O.S.: Not Otherwise Specified; OECD: Organisation for Economic Co-operation and Development; OEL: Occupational Exposure Limit; PBT: Persistent, Bioaccumulative and Toxic; PNEC: Predicted No-Effect Concentration; RID: Regulations concerning the International Carriage of Dangerous Goods by Rail; SDS: Safety Data Sheet; STP: Sewage treatment plant; ThOD: Theoretical oxygen demand; TLM: Median Tolerance Limit; VOC: Volatile Organic Compounds; vPvB: Very Persistent and Very Bioaccumulative;</p>
Disclaimer	<p>Data and information contained in this Safety Data Sheet are based on our available knowledge at the last revision date. No guarantee can be given as to the sufficiency of any safety measures contained in this Safety Data Sheet, nor can it be assumed that other or additional measures may not be required under particular or exceptional circumstances. The user must make sure of the suitability and completeness of the information, according to the specific use they want to do.</p>