



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 9/1/2025 Version: 1.0

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

1.1. Product identifier

| | |
|-------------------------------|--|
| Product form | : Substance |
| Trade name | : ORLEance ^{TECH 900} |
| IUPAC name | : Propylene glycol |
| EC-No. | : 200-338-0 |
| CAS-No. | : 57-55-6 |
| REACH registration No. | : 01-2119456809-23-0273 |
| Formula | : C ₃ H ₈ O ₂ |
| Product group | : Trade product |
| Other means of identification | : MPG (propane-1,2-diol) |

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

Relevant identified uses

| | |
|-------------------|--|
| Main use category | : Raw material for the chemical-technical industry, Component for the production of, Distribution of substance, Formulation (re)packing of substances and mixtures, Polymer production, Manufacture of metalworking fluid, Use in rubber production and processing, Aircraft de-icing, Fuel additive, Protective coatings, Industrial and professional use for chemical analysis, calibration, (routine) quality control, laboratory use, under controlled conditions, Water treatment |
|-------------------|--|

Uses advised against

| | |
|---------------------|---|
| Restrictions on use | : Manufacture of basic pharmaceutical products and pharmaceutical preparations, Food/feedstuff additives, Cosmetics, personal care products, Perfumes, fragrances, Manufacture of food products |
|---------------------|---|

1.3. Details of the supplier of the safety data sheet

Manufacturer

ORLEN Południe S.A.
Fabryczna 22
32-540 Trzebinia
Poland
T +48 24 201 00 00, F +48 24 367 74 14
E-mail address of competent person responsible for the SDS : reach.poludnie@orlen.pl

1.4. Emergency telephone number

| | |
|------------------|--|
| Emergency number | : +48 24 201 00 00 Emergency number 112 |
|------------------|--|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

No labelling applicable

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2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
 This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|------------------------------|--|----------|---|
| ORLEance ^{TECH 900} | CAS-No.: 57-55-6 EC-No.: 200-338-0 REACH-no: 01-2119456809-23-0273 | 90 – 100 | Not classified |

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
 First-aid measures after skin contact : Wash skin with plenty of water.
 First-aid measures after eye contact : Rinse eyes with water as a precaution.
 First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Emergency procedures : Ventilate spillage area.

For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment.

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 : Store in a well-ventilated place. Keep cool.

Germany

Storage class (LGK, TRGS 510) : LGK 10 - Combustible liquids

Joint storage table :

| | | | | |
|----------|---------|----------|----------|-----------|
| LGK 1 | LGK 2A | LGK 2B | LGK 3 | LGK 4.1A |
| LGK 4.1B | LGK 4.2 | LGK 4.3 | LGK 5.1A | LGK 5.1B |
| LGK 5.1C | LGK 5.2 | LGK 6.1A | LGK 6.1B | LGK 6.1C |
| LGK 6.1D | LGK 6.2 | LGK 7 | LGK 8A | LGK 8B |
| LGK 10 | LGK 11 | LGK 12 | LGK 13 | LGK 10-13 |

Joint storage not permitted for : LGK 1, LGK 2A, LGK 5.1A, LGK 6.2, LGK 7

Joint storage with restrictions permitted for : LGK 4.1A, LGK 4.2, LGK 4.3, LGK 5.1B, LGK 5.1C, LGK 5.2

Joint storage permitted for : LGK 2B, LGK 3, LGK 4.1B, LGK 6.1A, LGK 6.1B, LGK 6.1C, LGK 6.1D, LGK 8A, LGK 8B, LGK 10, LGK 11, LGK 12, LGK 13, LGK 10-13

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

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Poland - Occupational Exposure Limits

| | |
|----------------------|--|
| Local name | Propano-1,2-diol |
| NDS (OEL TWA) | 100 mg/m ³ pary i frakcja wdychalna |
| Remark | Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która stwarza zagrożenie dla zdrowia po zdeponowaniu w drogach oddechowych. |
| Regulatory reference | Dz. U. 2024 poz. 1017 wraz z późn. zm. |

DNEL and PNEC

ORLEvance TECH 900 (57-55-6)

DNEL/DMEL (Workers)

| | |
|--|-----------------------|
| Long-term - systemic effects, inhalation | 168 mg/m ³ |
| Long-term - local effects, inhalation | 10 mg/m ³ |

DNEL/DMEL (General population)

| | |
|--|----------------------|
| Long-term - systemic effects, inhalation | 50 mg/m ³ |
| Long-term - local effects, inhalation | 10 mg/m ³ |

PNEC (Water)

| | |
|--------------------------------------|----------|
| PNEC aqua (freshwater) | 260 mg/l |
| PNEC aqua (marine water) | 26 mg/l |
| PNEC aqua (intermittent, freshwater) | 183 mg/l |

PNEC (Sediment)

| | |
|------------------------------|----------------|
| PNEC sediment (freshwater) | 572 mg/kg dwt |
| PNEC sediment (marine water) | 57.2 mg/kg dwt |

PNEC (Soil)

| | |
|-----------|--------------|
| PNEC soil | 50 mg/kg dwt |
|-----------|--------------|

PNEC (STP)

| | |
|-----------------------------|------------|
| PNEC sewage treatment plant | 20000 mg/l |
|-----------------------------|------------|

8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

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Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Physical state | : Liquid |
| Colour | : Colourless. |
| Odour | : Practically odourless. |
| Odour threshold | : Not available |
| Melting point | : -60 °C |
| Freezing point | : Not available |
| Boiling point | : 184 °C Atm. press.: 100,32 kPa Decomposition: 'no' |
| Flammability | : Non flammable. |
| Lower explosion limit | : 12.5 vol % |
| Upper explosion limit | : 2.5 vol % |
| Flash point | : 104 °C Atm. press.: 100,01 kPa |
| Auto-ignition temperature | : > 400 °C |
| Decomposition temperature | : Not available |
| pH | : 6.5 – 7.5 |
| Viscosity, kinematic | : 40 – 45 mm ² /s |
| Solubility | : diluted in water. Soluble in acetone. Soluble in ethanol. Soluble in chloroform. Soluble in ether. |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Partition coefficient n-octanol/water (Log Pow) | : -1.07 |
| Vapour pressure | : 20 Pa Temp.: 25 °C |
| Vapour pressure at 50°C | : Not available |
| Density | : Not available |
| Relative density | : 1.03 Type: 'relative density' Temp.: 20 °C |
| Relative vapour density at 20°C | : Not available |
| Particle characteristics | : Not applicable |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

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10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
 Acute toxicity (dermal) : Not classified
 Acute toxicity (inhalation) : Not classified

ORLEvance TECH 900 (57-55-6)

| | |
|-----------------------|--|
| LD50 oral rat | 22000 mg/kg bodyweight Animal: rat |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight Animal: rabbit |
| LC50 Inhalation - Rat | > 44.9 mg/l air Animal: rat, Guideline: other: |

Skin corrosion/irritation : Not classified
 pH: 6.5 – 7.5
 Serious eye damage/irritation : Not classified
 pH: 6.5 – 7.5
 Respiratory or skin sensitisation : Not classified
 Germ cell mutagenicity : Not classified
 Carcinogenicity : Not classified
 Reproductive toxicity : Not classified
 STOT-single exposure : Not classified
 STOT-repeated exposure : Not classified

ORLEvance TECH 900 (57-55-6)

| | |
|--|--|
| NOAEL (subchronic, oral, animal/male, 90 days) | 443 mg/kg bodyweight Animal: cat, Animal sex: male |
|--|--|

Aspiration hazard : Not classified

ORLEvance TECH 900 (57-55-6)

| | |
|----------------------|----------------------------|
| Viscosity, kinematic | 40 – 45 mm ² /s |
|----------------------|----------------------------|

11.2. Information on other hazards

Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

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SECTION 12: Ecological information

12.1. Toxicity

- Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
- Hazardous to the aquatic environment, short-term (acute) : Not classified
- Hazardous to the aquatic environment, long-term (chronic) : Not classified

ORLEvance TECH 900 (57-55-6)

| | |
|----------------------|---|
| LC50 - Fish [1] | 51600 mg/l Test organisms (species): <i>Oncorhynchus mykiss</i> (previous name: <i>Salmo gairdneri</i>) |
| LC50 - Fish [2] | 51400 mg/l Test organisms (species): <i>Pimephales promelas</i> |
| EC50 72h - Algae [1] | 24200 mg/l Test organisms (species): <i>Raphidocelis subcapitata</i> (previous names: <i>Pseudokirchneriella subcapitata</i> , <i>Selenastrum capricornutum</i>) |
| EC50 72h - Algae [2] | 19300 mg/l Test organisms (species): <i>Skeletonema costatum</i> |
| EC50 96h - Algae [1] | 19000 mg/l Test organisms (species): <i>Raphidocelis subcapitata</i> (previous names: <i>Pseudokirchneriella subcapitata</i> , <i>Selenastrum capricornutum</i>) |
| EC50 96h - Algae [2] | 19100 mg/l Test organisms (species): <i>Skeletonema costatum</i> |

12.2. Persistence and degradability

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| | |
|-------------------------------|--------------------|
| Persistence and degradability | rapidly degradable |
|-------------------------------|--------------------|

12.3. Bioaccumulative potential

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| | |
|---|-------|
| Partition coefficient n-octanol/water (Log Pow) | -1.07 |
|---|-------|

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

ORLEvance TECH 900 (57-55-6)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

- Adverse effects on the environment caused by endocrine disrupting properties : The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / RID

| ADR | IMDG | RID |
|---|---|-----------------------------------|
| NOT SUBJECT | NOT SUBJECT | |
| 14.1. UN number or ID number | | |
| Not applicable | Not applicable | Not applicable |
| 14.2. UN proper shipping name | | |
| Not applicable | Not applicable | Not applicable |
| 14.3. Transport hazard class(es) | | |
| Not applicable | Not applicable | Not applicable |
| 14.4. Packing group | | |
| Not applicable | Not applicable | Not applicable |
| 14.5. Environmental hazards | | |
| Dangerous for the environment: No | Dangerous for the environment: No Marine pollutant: No | Dangerous for the environment: No |
| No supplementary information available | | |

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Rail transport

No data available

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

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PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

National regulations

Germany

VOC ordinance (ChemVOCFarbV)

:

Employment restrictions

: Observe restrictions according Act on the Protection of Working Mothers (MuSchG).
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK)

: WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 280).

Major Accidents Ordinance (12. BImSchV)

: Is not subject to the Major Accidents Ordinance (12. BImSchV)

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Poland

Polish National Regulations

: Regulation of the Minister of Economy of 21 December 2005 on the essential requirements for personal protective equipment (J. o L. No. 259, item 2173).
 Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
 Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
 Regulation of the Minister of Health of 10 August 2012 on the criteria and classification method of chemical substances and their mixtures (consolidated text: J. o L. 2015, item 208).
 Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
 Regulation of the Minister of Health of 20 April 2012 on labelling of hazardous substances and hazardous mixtures and certain mixtures (consolidated text: J. o L. 2015, item 450)
 The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
 Regulation of the Minister of Environment of 3 September 2014 on designs of packaging labelling (J. o L. 2014 item 1298)
 Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
 Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
 The ADR Agreement - Annex to the J. o L. of 26 April 2019 Government Statement of 18 February 2019 on the entry into force of the amendments to Annex A and B to the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o L. 2019, item 769)
 The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
 Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
 Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
 Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
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15.2. Chemical safety assessment

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]
 No chemical safety assessment has been carried out for the substance or the mixture by the supplier
 No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Not applicable.

Abbreviations and acronyms:

| | |
|-----|---|
| 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 |

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Abbreviations and acronyms:

| | |
|---------|--|
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| COD | Chemical oxygen demand (COD) |
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| 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 |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| PBT | Persistent Bioaccumulative 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 (ThOD) |
| TLM | Median Tolerance Limit |
| VOC | Volatile Organic Compounds |
| CAS-No. | Chemical Abstract Service number |
| N.O.S. | Not Otherwise Specified |
| vPvB | Very Persistent and Very Bioaccumulative |
| ED | Endocrine disruptor |

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Training advice : Personal monitoring. As from 24 August 2023 adequate training is required before industrial or professional use.

The classification complies with : ATP 12

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