

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Issue date: 3/20/2026 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : ORLEmix^{HDS}
Product group : Trade product

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

1.2.1. Relevant identified uses

Main use category : Manufacture of substances, Use as an intermediate, Distribution of substance, Formulation (re)packing of substances and mixtures, coatings, Lubricants, greases, release products, adhesion promoter and coupling agent, Fertilisers and fertilising products, Use in rubber production and processing, industrial production of finished articles made from plastic, Use in laboratories, Explosive materials, Candles - scented and unscented, Production aid for use in the pulp and paper industry

1.2.2. Uses advised against

Restrictions on use : No additional information

1.3. Details of the supplier of the safety data sheet

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

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 mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are 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 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Comments : Note N:
The classification as a carcinogen need not apply if the full refining history is known and it can be shown that the substance from which it is produced is not a carcinogen. This note applies only to certain complex oil-derived substances in Annex I.
Note L:
The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346. This note applies only to certain complex oil-derived substances in Annex I.

Comments : This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]
This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH Annex II

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. If you feel unwell, seek medical advice.

First-aid measures after skin contact : Take off contaminated clothing. Gently wash with plenty of soap and water. Wash skin with plenty of water. The hot liquid may cause severe skin burns. Cool skin rapidly with cold water after contact with hot product. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse eyes with water as a precaution. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth out with water. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation : May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

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

Move the affected person away from the contaminated area and into the fresh air. Keep victim under observation. Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media**

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

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released. Thermal decomposition generates : Carbon monoxide. Carbon dioxide.

5.3. Advice for firefighters

Firefighting instructions : Evacuate area. Fight fire from safe distance and protected location. Prevent fire fighting water from entering the environment. Eliminate all ignition sources if safe to do so. Exercise caution when fighting any chemical fire.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Act in accordance with local emergency plan. Only qualified personnel equipped with suitable protective equipment may intervene. Do not touch or walk on the spilled product. No open flames, no sparks, and no smoking. Evacuate unnecessary personnel. Notify fire brigade and environmental authorities.

6.1.2. 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. Do not allow to enter drains or water courses. Do not allow product to spread into the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13. Section 15: Regulatory information.

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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.
Storage conditions : Keep cool. Protect from moisture. Protect from sunlight. Store in a well-ventilated place. Store in original container. Store in a dry place. Store in a closed container.
Incompatible materials : Strong oxidizing agents.
Heat and ignition sources : No open flames, no sparks, and no smoking.

Germany

Storage class (LGK, TRGS 510) : LGK 13 - Non-combustible solids

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 6.2, LGK 7
Joint storage with restrictions permitted for : LGK 4.1A, LGK 5.1C
Joint storage permitted for : LGK 2A, LGK 2B, LGK 3, LGK 4.1B, LGK 4.2, LGK 4.3, LGK 5.1A, LGK 5.1B, LGK 5.2, 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

Switzerland

Storage class (LK) : NG - Non-hazardous

7.3. Specific end use(s)

No additional information.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

ORLEmix^{HDS}

Poland - Occupational Exposure Limits

NDS (OEL TWA)	2 mg/m ³
OEL chemical category	E (Inhalable fraction)
Regulatory reference	Rozporządzenie Ministra Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

ORLEmix^{HDS}

DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	5.58 mg/m ³
--------------------------------------	------------------------

DNEL/DMEL (General population)

Acute - systemic effects, inhalation	1.19 mg/m ³
--------------------------------------	------------------------

PNEC (Oral)

PNEC oral (secondary poisoning)	9.33 mg/kg food
---------------------------------	-----------------

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Keep workplace clean and tidy as much as possible. Always wash hands after handling the product.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

Thermal hazard protection:

Use insulated gloves, impervious apron, long sleeves and other protective clothing when handling this material hot.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment. Do not exceed the occupational exposure limits (OEL).

Consumer exposure controls:

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: yellow to yellowish brown.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: ≥ 48 °C
Boiling point	: ≥ 300 °C
Flammability	: Non flammable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: ≥ 200 °C
Auto-ignition temperature	: ≥ 250 °C
Decomposition temperature	: Not available
pH	: ≈ 7
pH solution	: Not available
Viscosity, kinematic	: 4 – 5.4 mm ² /s
Solubility	: Soluble in hydrocarbons. Material insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: ≤ 20 Pa Temp.: 80 °C
Vapour pressure at 50°C	: Not available
Density	: ≈ 770 kg/m ³
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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.

ORLEmix^{HDS}

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

10.2. Chemical stability

Stable under normal conditions.

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). Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

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

ORLEmix^{HDS}

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation	: Not classified pH: ≈ 7
Serious eye damage/irritation	: Not classified pH: ≈ 7
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

ORLEmix^{HDS}

NOAEL (chronic, oral, animal/male, 2 years)	5700 mg/kg bodyweight
NOAEL (chronic, oral, animal/female, 2 years)	128 mg/kg bodyweight
Reproductive toxicity	: Not classified

ORLEmix^{HDS}

LOAEL (animal/male, F0/P)	125 mg/kg bodyweight Developmental toxicity
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight Reproductive toxicity
NOAEL (animal/male, F1)	30 mg/kg bodyweight Developmental toxicity
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

ORLEmix^{HDS}

LOAEL (dermal, rat/rabbit, 90 days)	200 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
NOAEL (dermal, rat/rabbit, 28 days)	1000 mg/kg bodyweight/day

ORLEmix^{HDS}

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ORLEmix^{HDS}

NOAEL (dermal, rat/rabbit, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
-------------------------------------	---

Aspiration hazard : Not classified

ORLEmix^{HDS}

Viscosity, kinematic	4 – 5.4 mm ² /s
----------------------	----------------------------

11.2. Information on other hazards

11.2.1. 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

11.2.2. Other information

No additional information available

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

12.2. Persistence and degradability

ORLEmix^{HDS}

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

ORLEmix^{HDS}

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Regional waste regulation : Disposal must be done according to official regulations. Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
- Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
- Sewage disposal recommendations : Do not allow to enter into surface water or drains.
- Product/Packaging disposal recommendations : Completely empty the packaging prior to decontamination. Comply with applicable regulations for solid waste disposal. Recycle or dispose of in compliance with current legislation. Beware of residues or vapours which remain in the drums. Discharging into rivers and drains is forbidden.

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

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)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

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)

Not listed on the Explosives Precursors list (EU)

Drug Precursors Regulation (EC 273/2004)

Not listed on the Drug Precursors list (EU)

15.1.2. National regulations

Austria

Toxic Substances Ordinance 2000 : Is not subject to the Toxic Substances Ordinance 2000.

Germany

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 3, Highly hazardous to water (Classification according to AwSV, Annex 1).

Netherlands

ABM category : Not determined

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).
 according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Spain

Royal Decree 665/1997

: Is not subject to the Royal Decree 665/1997

15.2. Chemical safety assessment

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
BLV	Biological limit value

Abbreviations and acronyms:	
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 Abstracts 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

Safety Data Sheet (SDS), EU