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

1.1 Product identifier

Product name	ODE INSULATION Glass Wool Blanket / Board / Pipe ODE Starflex, Lunaflex, ODE Evomineral, Pipelane

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

Intended use	Professional use; thermal insulation, HVAC and industrial equipment
Uses advised against	Not data available

1.3. Details of the supplier of the safety data sheet

Name	ODE Yalıtım Sanayi ve Ticaret A.Ş
Address	Hacı Şeremet Mevkii 3. Sokak Çorlu / Tekirdağ TÜRKİYE
Phone no	+90 282 676 46 64
Fax no	+90 282 676 46 68
E-mail	info@ode.com.tr

1.4. Emergency telephone number

For urgent inquiries refer to	Phone: +90 282 676 46 64 National Poison Information Center (UZEM) : 114

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements).

2.2. Label elements

Hazard pictograms: --

Signal words: --

Hazard statements: --

Precautionary statements: --

This product is not subject to hazard labeling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

2.3. Other hazards

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

The substance does not have persistence, bioaccumulation and toxicity (PBT) properties and is not very persistent and very bioaccumulative. (vPvB).

The substance does not have endocrine disrupting properties.

SECTION 3. Composition/information on ingredients

3.1. Substances

Information not relevant

3.2. Mixtures

Identification		Conc. %	Classification (EC) 1272/2008 (CLP)
GLASS WOOL Man-made vitreous (silicate) fibres with random orientation with alkaline oxide and alkali earth oxide (Na2O+K2O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the note Q conditions			
EC No	926-099-9	90-100	Not classified
CAS No	-		*Substance with occupational exposure limit*
INDEX	-		

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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

Information not 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 EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use breathing equipment if fumes or powders are released into the air. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure good ventilation of the workstation. Wear personal protective equipment. Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry. Keep in a cool, well-ventilated place away from incompatible materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from moisture. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

GLASS WOOL

Threshold Limit Value

Country	Type	TWA/8h		STEL/15min		Remarks / Observations
		mg/m³	ppm	mg/m³	ppm	
USA	TLV	1 fiber/cm³				(respirable fibers)
USA	REL	3 fibers/cm³ 5 mg/m³				(fiber diameter ≤ 3.5 µm & fiber length ≥ 10 µm) (total)
USA	PEL	5 mg/m³ 15 mg/m³				(respirable) (total)

8.2. Exposure controls

Comply with the safety measures usually applied when handling chemical substances.

HAND PROTECTION
In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves (see standard EN 374).
Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

SKIN PROTECTION
Wear professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a type FFP1 or higher class face mask if otherwise required by the risk assessment (see standard EN 149).
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS
The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Physical state	Solid	
Appearance	Roll (blanket), panel (board), pipe section	
Colour	Yellow, depending on binder type and content.	
Odour	Odourless	
Melting point / freezing point	Glass wool >700 °C Aluminium ~660 °C	
Initial boiling point	Not available	
Flammability	Not flammable	
Lower explosive limit	Not available	
Upper explosive limit	Not available	
Flash point	Not available	
Auto-ignition temperature	Not available	
pH	Not available	
Kinematic viscosity	Not available	
Solubility	Not available	
Partition coefficient: n-octanol/water	Not available	
Vapour pressure	Not available	
Density and/or relative density	8-110 g/cm^3	
Specific gravity	2.2 - 2.6 (water=1)	
Relative vapour density	Not available	
Particle characteristics	Not available	

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Information not available

9.2.2. Other safety characteristics

Explosive properties	not available	
Oxidising properties	not available	
Approximate nominal diameter of fibres	not available	
Length	approx. < 6 µm	weight geometric mean diameter less 2 standard errors
Orientation of fibres	Random	

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

Binder will decompose above 250°C

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

However the usual precautions used for chemical products should be respected. Heating above 200°C.

10.5. Incompatible materials

Information not available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Decomposition of binder above 250°C may produce carbon dioxide and some trace gases. The duration of release is dependent upon the thickness of the insulation, binder content and the temperature applied.

SECTION 11. Toxicological information

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

GENERAL INFORMATION

Not toxic, but dust from glass fibre wool may cause irritation or scratchiness of the throat, and/or itching in the eyes and skin.

Metabolism, toxicokinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

Does not meet the classification criteria for this hazard class

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

Respiratory sensitization

Information not available

Skin sensitization

Information not available

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

CLP 1272/2008 - Note Q: The classification as a carcinogen need not apply if it can be shown that the substance fulfils one of the following conditions: a short term biopersistence test by intratracheal instillation has shown that the fibres longer than 20 µm have a weighted half-life less than 40 days

IARC(2002): Insulation glass wool, rock (stone) wool, and slag wool, and continuous filament glass: Group 3 - Not classifiable as carcinogenic to humans because of the inadequate evidence of carcinogenicity in humans and the relatively low biopersistence of these materials

IRIS (EPA 2001) : Glass wool, continuous filament glass, rock wool, slag wool: No cancer assessments

The biopersistance of ODE Starflex fibres was investigated on Fraunhofer laboratory according to the protocol of the European Commission (ECB/TM 27 Rev.7, 1998). Following haftimes were calculated (ITEM Study no: 02G09017):

- WHO fibre fraction (L>5µm, D<3µm, L/D>3/1) ≤ 40 days
- Long fibres fraction (length >20µm) ≤ 40 days

According to Appendix IV Nr.22 of the German Gefahrstoffverordnung (Dangerous Substances Act, Revision date October 12, 2007) for using MMVF for heat and sound insulation in building construction in Germany the half-time of the WHO fibre fraction is less than 40 days.

According to Directive 67/548/EEC (revised by guideline 97/69/EG of the Commission dated December 5th , 1997) Note Q, the classification as a carcinogen need not to apply if the halftime for fibres longer than 20 µm is less than 40 days in the biopersistance test by intratracheal instillation.

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

Information not available

Adverse effects on development of the offspring

Information not available

Effects on or via lactation

Information not available

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Information not available

Route of exposure

Information not available

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the substance is not listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Information not available

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

The substance does not have persistence, bioaccumulation and toxicity (PBT) properties and is not very persistent and very bioaccumulative. (vPvB).

12.6. Endocrine disrupting properties

Based on the available data, the substance is not listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

12.7. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Neat product residues should be considered special non-hazardous waste.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Solid residues may be suitable for disposal in an authorised landfill site.

European List of Waste (LoW) code: 17 06 04 - insulation materials other than those mentioned in 17 06 01 and 17 06 03

CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

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 precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EU:

None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

None

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

Not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage more than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

15.2. Chemical safety assessment

Has not been performed / is not yet available a chemical safety assessment for the substance.

SECTION 16. Other information

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP

- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
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20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

NOTE FOR USERS:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.
This document must not be regarded as a guarantee on any specific product property.
The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.
Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.
Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.
Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

EUCEB INFORMATION:

All products manufactured by ODE Yalıtım are made of non-classified fibres and are certified by EUCEB.

EUCEB, European Certification Board of Mineral Wool Products - www.euceb.org, is a voluntary initiative by the mineral wool industry. It is an independent certification authority that guarantees that products are made of fibres, which comply with the exoneration criteria for carcinogenicity (Note Q) of the Directive 97/69/EC and the Regulation (EC) 1272/2008.

To ensure that fibres comply with the exoneration criteria all tests and supervision procedures are carried out by independent, expert qualified institutions. EUCEB ensures that the producers of mineral wool have put in place self-control measures.

The mineral wool producers commit to EUCEB to:

- supply sampling and analysis reports established by laboratories recognized by EUCEB, proving that the fibres comply with one of the four criteria of exoneration described in Note Q of the Directive 97/69/EC,
- be controlled, twice per year, of each production unit by an independent third party recognized by EUCEB (sampling and conformity to the initial chemical composition),
- put in place procedures of internal self-control in each production unit.

The products responding to the EUCEB certification are recognized by the EUCEB logo put on the packaging.



Further information can be obtained from: www.euceb.org

DISCLAIMER OF LIABILITY:

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.