



## MATERIAL SAFETY DATA SHEET

This Material Safety Data Sheet has been prepared in accordance with directive of 91/155/ECC and ISO 11014-1 standard.

Product Name : **ODE STARFLEX**

Document No : MSDS-STARFLEX

Publication Date : 01.03.2009

Revision Date : 02.08.2011

Revision No : 01

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

**Trade Name of Product** : ODE STARFLEX GLASSWOOL- Roof Insulation Blanket, Partition Board, Siliconized Wall Board , Siliconized and Glass Mat Faced Wall Board, Siliconized and Glass Mat Faced Facade Board, HVAC Board, Aluminium Faced HVAC blanket, Aluminium and Glass Mat faced Insulation Board

**Product Group** : Thermal Insulation Board

**Producer** : ODE Inc.

**Production Plant** : Hacı Şeremet Mevkii 3. Sokak Çorlu /Tekirdağ

#### **Emergency Consultation:**

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### 2 . COMPOSITION / INFORMATION OF INGREDIENTS

Component	Concentration %
Fiber glasswool (EINECS 266-046-0)	>90
Urea extended phenol-formaldehyde resin (cured), Mineral oil	<10

See Section 8 of this MSDS for Exposure Guidelines

### 3 . HAZARDS IDENTIFICATION

Under normal use conditions, this product is not expected to create any unusual emergency hazards.

**Potential Health Effects** : following direct contact with the product or high levels of its dust.

**Eye contact:** Temporary irritation, itching or redness may occur.

**Skin:** Skin absorption is unlikely due to physical properties. Temporary itching, rash or redness may occur only.

**Ingestion:** Ingestion of this product is unlikely. If swallowed may cause blockage of the digestive tract, gastrointestinal irritation, nausea, vomiting and diarrhea.

**Inhalation:** Due to the thick diameters of the glass fibers, they cannot be inhaled into the lower lung. Therefore, the effects of dust is limited to irritation of the upper respiratory tract, a scratchy throat, congestion and slight coughing.



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### 4 . FIRST AID MEASURES

**Eye Contact:** Do not scratch your eyes. Eyes may be treated by flushing with large amounts of water for 10-15 minutes. If irritation persists, seek medical attention.

**Skin Contact:** Skin may be treated by gently washing affected area with soap and warm water. If irritation persists get medical advice.

**Ingestion:** Although unlikely, but if product is ingested in its whole form, may cause blockage of the digestive system. Seek medical aid immediately. If dust is ingested rinse mouth with water to remove fibers, and drink plenty of water to reduce the irritation.

**Inhalation:** If dust is inhaled remove the affected person to fresh air and loosen collar, tie or belt. Drink water to clear throat, and blow nose to remove dust. If not breathing give artificial respiration.

### 5 . FIRE FIGHTING MEASURES

**Flammable Limits:**

**Lower Flammability Limit (LFL):** Not applicable

**Upper Flammability Limit (UFL):** Not applicable

**Auto Ignition:** Not applicable

**Sensitivity to mechanical impact:** Not Determined

**Sensitivity to static discharge:** Not Determined

Glass wool is non flammable and combustable. No fire or explosion hazard exists. But resin binders and facings may decompose if heated over 300°C or burn in fire situation.

**Extinguishing Media:** Foam, CO<sub>2</sub>, dry chemical or water spray.



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**Fire-fighting Instructions:** Isolate fire area and deny unnecessary entry. Use water to cool and prevent re-ignition, localize fire zone. If material is molten, use fine water spray or foam. Do not apply direct water stream.

**Hazardous Combustion Products:** The smoke during combustion of this product may include carbon, carbon monoxide, carbon dioxide, formaldehyde, amine. These fumes or vapors may cause eye, nose, throat or respiratory irritation, or other effects such as headache.

**Special Fire-fighting equipment:** Wear self-contained breathing apparatus (SCBA) and full protective clothing (includes fire fighting helmet, coat, pants, boots, and gloves).

### 6 . ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Handle as general inert material.

**Environmental Precautions:** No specific measures. But glass wool will sink and cannot be removed easily from waterways. However, the material is non hazardous in water.

**Waste disposal:** Dispose of in accordance with local and state regulations as a non-hazardous waste.

**Cleanup Procedure:** Pick up large pieces, clean up the dust with vacuum cleaner and place in suitable container for disposal. If sweep, use dust suppressant.

### 7 . HANDLING AND STORAGE

**Handling:** No special handling required. But prevent spread of fibrous glass dust in the workplace. In case of insufficient ventilation use protective equipment as described in Section 8 of this material safety data sheet.

**Storage:** Keep away from heat, sparks or open flame. Protect from moisture.



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### 8 . EXPOSURE CONTROLS AND PERSONAL PROTECTION

This material is in a solid form; therefore, exposures to hazardous fumes are not expected to occur. But user operations may generate glass fiber dust, therefore sufficient ventilation should be provided at areas of cutting to keep airborne dust and fibers below exposure limits.

#### Personal Protective Equipment

**Respiratory Protection** : Wear EN143 approved respiratory equipment when ambient dust or fiber concentrations exceed the applicable exposure limits.

**Skin Protection** : Wear leather or cotton gloves, a cap, a loose-fitting, long-sleeved shirt and long pants to protect skin from irritation.

**Eye Protection** : Use safety glasses with sideshields

**Ears Protection** : Use earplugs, hood or earmuffs to prevent airborne dust or fibers from entering the ear

**Other** : Wash hands after contact with this product and before eating, drinking and using tobacco products. To prevent glass fiber migration wash work clothes separately from other clothing.

### 9 . PHYSICAL AND CHEMICAL PROPERTIES

Physical State	: Solid
Appearance	: Random orientated fibrous glass
Colour	: Yellow, depending on binder type and content
Odour	: Odourless
Service Temperature paper laminated Al foil )	: max. 250°C or 90°C (for products faced with kraft
Density of product components	: Glass wool 12-100 kg/m <sup>3</sup> Aluminium 2700 kg/m <sup>3</sup>
Specific Gravity of glass	: 2,2-2,6 (Water = 1)



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Boiling Point	: Not Applicable
Flash Point	: None
Melting Point of product components	: Aluminium ~ 660°C; Glass wool > 700°C
Auto-Flammability	: None flammable
pH	: Not Applicable
Vapour Pressure	: Not Applicable
Explosion data	: Not Applicable
Solubility in Water	: Not soluble

### 10 . STABILITY AND REACTIVITY

**Chemical Stability** : This product is not reactive and stable at ambient temperature.

**Incompatibility** : Avoid contact with hydrofluoric acid. Resin binders may be attacked by acids, alkalines or solvents.

**Conditions Contributing to Instability** : Heating over 300°C may cause decomposition or burn of resin binder and facing.

**Hazardous Decomposition Products** : Carbon monoxide, carbon dioxide, carbon particles, formaldehyde, traces of hydrogen cyanide are derived from burning.

**Hazardous Polymerization**: Will not occur.

### 11 . TOXICOLOGICAL INFORMATION

#### **Acute Toxicity**

**General product Information**: Fiber glass wool in general is not classified as a dangerous substance according to 67/548/EEC and 97/69/EC and do not present any significant risk or chronic health effect to humans when used for insulation purposes under normal conditions of handling and use, as for any other product.



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**Component Toxicity and Carcinogenicity: Fibre Glass wool (65997-17-3):** Not toxic, but dust from glass fibre wool may cause irritation or scratchiness of the throat, and/or itching in the eyes and skin.

**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**

### 12 . ECOLOGICAL INFORMATION

This product is not expected to be dangerous for the environment.

**Degradation:** This product is not short term biodegradable. However, long term degradation products may arise.

**Bioaccumulation:** This product is not expected to bio cumulate.

**Ecotoxicity influence on Organisms:** Not Established

**Ecotoxicity in water:** Unlikely to cause long term effects in the aquatic environment.

**Other toxicity:** Not Established

### 13 . DISPOSAL CONSIDERATIONS

This product is not classified as a hazardous waste under the EU hazardous waste directive 91/689/EEC and can be recycled.

**European Union Waste Code No:** EWC-Code 101103 (waste glass-based fibrous materials) Dispose of waste by suitable means under conditions approved by the local authority or via a licensed waste disposal contractor.



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### 14 . TRANSPORT INFORMATION

This product is not danderous 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 International Air Transport Association ( IATA ) regulations.

### 15 . REGULATORY INFORMATION

**European Union:** This product does not require labeling as a dangerous substance according to the Manual of Decisions for Implementation of the Sixth and Seventh Amendments to Directive 67/548/EEC on Dangerous Substances (Directives 79/831/EEC and 92/32/EEC).

### 16 . OTHER INFORMATION

The information given by this MSDS is based on the present state of our knowledge and experience. It is made in good faith without any guarantee or warranty of accuracy. The MSDS only describes the products in aspect to their safety requirements. Recipients of our product must take responsibility for observing existing laws and regulations.

Please contact to manufacturer if you would like more detailed information.

#### **ABBREVIATIONS:**

IARC - International Agency for Research on Cancer

IRIS - Integrated Risk Information System