



**PENOPLEX SPb**  
L I M I T E D

## Material safety data sheet

Date: 01 June 2020

Product name: PENOPLEX thermal insulation XPS board, also identified as:

PENOPLEX BASE,

PENOPLEX Osnova,

PENOPLEX GEO,

PENOPLEX STRONG

PENOPLEX type 45

PENOPLEX EXTRA.

### 1. Product and manufacturer

**1.1. Trade name:** PENOPLEX thermal insulation XPS board

**1.2. Intended use of material or product:** Thermal insulation

**1.3. Identification of manufacturer, importer or other business entity**

Manufacturer:

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### 2. Hazardous properties

The product is not classified as a hazardous material.

### 3. Composition and materials

PENOPLEX consists of glass-like clear polystyrene, propellant (carbon dioxide), foaming agent, processing agents and colour additives.

### 4. First aid

No special instructions apply.

### 5. Fire protection

**5.1. Applicable extinguishing agents:** Water, dry chemicals, regular extinguishing foams, carbon dioxide, fire blanket.

**5.2. Extinguishing procedure:** Isolate the danger zone and prevent unauthorised access to the area. Use fine water spray or foam to extinguish the fire. If the material has melted, do not spray the extinguishing agent directly onto the material. Soak the material thoroughly to cool it down and prevent re-ignition. Water the environment to prevent the fire from spreading.

**5.3. Protective equipment to be used in case of fire:** Compressed air line breathing apparatus and appropriate fire fighting equipment is required. If no protective equipment is available, the fire must be extinguished from a protected position and/or safe distance.

**5.4. Fire and explosion hazards:** Mechanical cutting, grinding and sawing may cause the formation of dust. Accumulation of dust must be avoided to reduce the risk of dust explosion. The product is combustible and must be protected from naked flames and other sources of heat.

**5.5. Combustion products:** Water, carbon dioxide, water vapours and a small quantity of carbon monoxide and carbon monomers.

## **6. Procedure required in case of emission:**

Material is to be collected mechanically.

## **7. Storage and handling**

**7.1. Handling:** Mechanical cutting, grinding and sawing may cause the formation of dust. Accumulation of dust must be avoided to reduce the risk of dust explosion. The product is combustible and may cause a risk of fire if handled or installed incorrectly. When installed, the product must be shielded as required by national construction regulations and product-specific guidelines.

**7.2. Storage:** The product must not be exposed to naked flames or other ignition sources during transportation, storage, installation or use. If stored for extended periods, the boards must be protected from UV radiation.

## **8. Prevention of exposure; personal protective equipment**

### **8.1 Exposure limit values:**

Exposure thresholds are specified for some materials used in the product at room temperature. In ordinary use, however, exposure levels remain significantly below the thresholds.

### **8.2 Personal protective equipment:**

Use of protective eyewear is recommended when working the product mechanically. One-piece safety glasses (with side shields) as specified in standard EN 166 or comparable safety goggles are required. The use of a respirator mask is recommended when applying heat treatment to the product.

## **9. Physical and chemical properties**

**Form:** Solid

**Colour:** Orange

**Odour:** Faint inherent odour

**Density:** 25 to 45 kg/m<sup>3</sup>

**Solubility in water:** None.

**Solubility in solvents:** Dissolves in aromatic and organic solvents.

## **10. Stability and reactivity**

### **10.1 Stability/instability:**

The product is thermally stable in normal usage temperatures.

### **10.2 Incompatible materials:**

Organic chemicals, hydrocarbon solvents

**Maximum usage temperature:** +75°C

## **11. Health impacts**

**11.1. When swallowed:** Accidents involving swallowing of the product are unlikely due to the physical form of the product. No harmful effects are anticipated in the event of swallowing small quantities of the product.

### **11.2. Inhalation:**

The dust produced when the product is worked mechanically may cause irritation of the upper respiratory tract (nose, throat). Smoke and fumes released when applying heat treatment, such as hot-wire cutting, may cause irritation of the respiratory tract.

### **11.3. Eyes:**

The product in solid form or the dust produced when the product is worked mechanically may cause irritation.

## **12. Harmful environmental impacts**

No known impact.

## **13. Waste handling**

The material should be recycled using all means available. If the material cannot be recycled, it must be disposed of as specified in guidelines issued by local authorities e.g. by delivering the material to an approved landfill, waste incineration plant or recycling plant.

The packaging material is recyclable.

## **14. Transportation information**

The product is a non-hazardous substance. No special requirements apply.

## **15. Regulations concerning chemicals**

Warning label: Not required.

## **16. Further information**

Usage: The product is a thermal insulation material.

PENOPLEX SPb, Ltd recommends that all customers and/or recipients of this material safety data sheet familiarise themselves with the data sheet and, if required, consult a professional to fully comprehend the information presented in the material safety data sheet and the risks associated with the product. Regulations may vary in different countries and regions. It is the responsibility of the purchaser/user to ensure that all activities comply with local laws and regulations. The data provided in the material safety data sheet only applies to the product in the form delivered by the manufacturer. As the manufacturer has no control over the conditions in which the product is used, the purchaser/user is responsible for determining the appropriate circumstances for safe use of the product. The manufacturer assumes no responsibility for material safety data received from sources other than the manufacturer. If you are unsure about the origin of the material safety data sheet, please contact the manufacturer for the latest version of the material safety data sheet.

All information provided in this material safety data sheet is based on currently available data.