

SAFETY DATA SHEET

PNP ORANGE KFT

Safety Data Sheet according to Regulation (EU) 2015/830

Product name: **PNP[®] XPS**
Extruded Polystyrene Foam

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PNP Orange Kft recommends and expects that you read and understand the entire SDS as it contains important information. We expect you to follow the precautions outlined in this document unless other methods or actions are required by the conditions of use.

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name: **PNP[®] XPS** Extruded Polystyrene Foam

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

Identified uses: Thermal insulation

1.3 Details of the supplier of the safety data sheet

Company identification:

PNP Orange Kft.,
Fehérvári út 28-14,
Varpalota,
8100, Hungary

Customer Information:

sales@pnpinsulation.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.3 Other hazards

No data available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

The product is an article.

CAS No / EC No	REACH Registration Number	Concentration	Component	Classification: Regulation (EC) No 1272/2008
-	-	100 %	Polystyrene foam	-

If present in this product, any not classified components disclosed above for which no country specific OEL value(s) is (are) indicated under Section 8, are being disclosed as voluntarily disclosed components.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice:

If potential for exposure exists, refer to Section 8 for specific personal protective equipment.

Inhalation:

Move person to fresh air; if effects occur, consult a physician.

Skin contact:

Wash off with water.

Eye contact:

Flush eyes with water. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult an ophthalmologist. May cause injury due to mechanical action.

Ingestion:

No emergency medical treatment necessary.

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

Aside from the information found under Description of first aid measures (above) and Indication of any immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:

No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam.

Unsuitable extinguishing media:

No data available.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products:

During a fire, smoke may contain the original material in addition to combustion products of varying composition, which may be toxic and/or irritating. In smoldering or flaming conditions, carbon monoxide, carbon dioxide and carbon are generated. Based on combustion toxicity testing, the effects of combustion from this foam are less acutely toxic than the effects of combustion from common building materials such as wood.

Unusual Fire and Explosion Hazards:

Mechanical cutting, grinding or sawing can cause formation of dusts.

To reduce the potential for dust explosion, do not permit dust to accumulate. Dense smoke is produced when product burns.

5.3 Advice for firefighters

Fire Fighting Procedures:

Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone.

Special protective equipment for firefighters:

Wear positive-pressure self-contained breathing apparatus (SCBA) and protective firefighting clothing (includes firefighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

There are no special required instructions.

6.2 Environmental precautions:

There are no special required instructions.

6.3 Methods and materials for containment and cleaning up:

See Section 13, Disposal Considerations, for additional information.

6.4 Reference to other sections:

References to other sections, if applicable, have been provided in the previous sub-sections.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

Fabrication methods, which involve cutting into this product, may release the blowing agent(s) remaining in the cells. Provide adequate ventilation to assure localized concentrations in release areas are maintained below the lower flammable limit. Mechanical cutting, grinding or sawing can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate. This product is combustible and may constitute a fire hazard if improperly used or installed. When installed, this product should be adequately protected as directed by national building regulations or instructions.

7.2 Conditions for safe storage, including any incompatibilities:

During shipment, storage, installation and use, this material should not be exposed to flame or other ignition sources. In order to prevent buildup of combustible vapors, do not store large quantities of this product in unventilated spaces. Transport bulk shipments of this product in ventilated vehicles.

7.3 Specific end use(s):

See the technical data sheet on this product for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

If exposure limits exist, they are listed below.

Although some of the components of this product may have exposure guidelines, no exposure would be expected under normal handling conditions due to the physical state of the material.

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

8.2.2 Individual protection measures, such as personal protective equipment

Eye/face protection:

Eye protection should not be necessary. For fabrication operations safety glasses (with side shields), which consistent with EN 166 or equivalent, are recommended. If there is a potential for exposure to particles, which could cause eye discomfort, wear chemical goggles, which consistent with EN 166 or equivalent.

Skin protection

Hand protection:

Use gloves to protect from mechanical injury. Selection of gloves will depend on the task.

Other:

No precautions other than clean body-covering clothing should be needed.

Respiratory protection:

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. In dusty or misty atmospheres, use an approved particulate respirator. When respiratory protection is required for certain operations, including but not limited to saw, router or hot-wire cutting, use an approved air-purifying respirator.

Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2 (meeting standard EN 14387).

Environmental exposure controls

See Section 7: Handling and storage and Section 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:

Physical state

Foam

Color

Orange (mostly)

Odor

Odorless

Odor threshold

Odorless

pH

Not applicable

Melting point/range

> 75°C

Freezing point

Not applicable

Boiling point

Not applicable

Flash point closed cup

346°C (literature)

Evaporation rate

Not applicable

Lower explosive limit

No data available

Upper explosive limit

No data available

Vapor pressure

Not applicable

Relative density

Not applicable

Water solubility

Insoluble

Partition coefficient: n-octanol/water

Not applicable

Auto-ignition temperature

491°C (literature)

Decomposition temperature

> 300°C (literature)

Viscosity

Not applicable

Explosive properties

Not applicable

Oxidizing properties

Not applicable

9.2 Other information

Solid density

25 - 45 kg/m³

NOTE: The physical data presented above are typical values and should not be construed as a specification.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability:

Thermally stable at typical use temperatures.

10.3 Possibility of hazardous reactions:

Polymerization will not occur.

10.4 Conditions to avoid:

Avoid temperatures above 300°C.

Exposure to elevated temperatures can cause product to decompose. Avoid direct sunlight.

10.5 Incompatible materials:

Avoid contact with oxidizing materials: aldehydes, amines, esters, liquid fuels and organic solvents.

10.6 Hazardous decomposition products:

Does not normally decompose. Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: aromatic compounds, aldehydes, polymer fragments, ethylbenzene, styrene.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Swallowing is unlikely because of the physical properties. Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

Acute dermal toxicity

Skin absorption is unlikely due to physical properties.

Acute inhalation toxicity

Dust may cause irritation to upper respiratory tract (nose and throat). Fumes/vapors released during thermal operations such as hot wire cutting may cause respiratory irritation.

Skin corrosion/irritation

Essentially nonirritating to skin. Mechanical injury only.

Serious eye damage/eye irritation

Solid or dust may cause irritation due to mechanical action. Fumes/vapor released during thermal operations such as hot-wire cutting may cause eye irritation.

Respiratory or skin sensitization

No relevant data found.

Carcinogenicity

No relevant data found.

Reproductive toxicity

No relevant data found.

Specific target organ systemic toxicity (STOT) single and repeated exposure

No relevant data found.

Mutagenicity

No relevant data found.

Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

12.2 Persistence and degradability

Biodegradability:

Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

12.3 Bioaccumulative potential

Bioaccumulation:

No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

12.4 Mobility in soil

In the terrestrial environment, material is expected to remain in the soil.

12.5 Results of PBT and vPvB assessment

This article has not been assessed for persistence, bioaccumulation and toxicity (PBT).

12.6 Other adverse effects

Product contains no ozone-depleting component.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

All efforts to recycle material should be made. This material may be disposed of preferably by incineration under approved conditions or, in some countries, in approved landfills. Customers are advised to check their local legislation governing the disposal of waste materials. If incinerated, it is recommended that the flue gases be treated by a scrubber before exhausting to the atmosphere. Contact the authorized waste disposal services.

SECTION 14: TRANSPORT INFORMATION

Classification for Road and Rail transport (ADR/RID):

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not regulated for transport
14.3 Transport hazard class(es)	Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not considered environmentally hazardous based on available data
14.6 Special precautions for user	No data available

Classification for Sea transport (IMO-IMDG):

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not regulated for transport
14.3 Transport hazard class(es)	Not applicable
14.4 Packing group	Not applicable
14.5 Environmental hazards	Not considered as marine pollutant based on available data
14.6 Special precautions for user	No data available
14.7 Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not regulated for transport
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	No data available

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture REACH Regulation (EC) No 1907/2006

Based on our current knowledge, the product does not contain:

- substances restricted under REACH (Annex XVII of the Regulation);
- substances of very high concern (SVHC) as listed in Authorisation List (Annex XIV of the REACH regulation), especially HBCDD – hexabromocyclododecane – brominated flame retardant with high ecotoxicity;
- substances listed in the Candidate List of SVHC for authorisation, published by the European Chemicals Agency in concentration above 0,1% (w/w).

During the production of thermal insulation materials PNP no ozone-depleting blowing agents are used.

15.2 Chemical safety assessment

Not applicable

SECTION 16: OTHER INFORMATION

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) No 1272/2008

This product is not classified as dangerous according to EC criteria.

Identification SDS Number: 001

Full text of other abbreviations

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road;
CAS - Chemical Abstracts Service;
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008;
ECHA - European Chemicals Agency;
EC-Number - European Community number;
IATA - International Air Transport Association;
IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk;
ICAO - International Civil Aviation Organization;
IMDG - International Maritime Dangerous Goods;
IMO -International Maritime Organization;
MARPOL - International Convention for the Prevention of Pollution from Ships;
MW – molecular weight;
PBT - Persistent, Bioaccumulative and Toxic substance;
REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals;
RID -Regulations concerning the International Carriage of Dangerous Goods by Rail;
SDS - Safety Data Sheet;
SVHC - Substance of Very High Concern;
vPvB - Very Persistent and Very Bioaccumulative.

Information Source and References

PNP Orange Kft. recommends that all customers and/or recipients of this SDS familiarize themselves with the data and, if required, consult a professional to fully comprehend the information presented in the SDS 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 SDS 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 SDS, please contact the manufacturer for the latest version of the SDS.
All information provided in this SDS is based on currently available data.