

Anyag: TP0-0,5; TP0-1; TP0-4; TP3-6 *costruction of expanded perlite*  
version: 2.1

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

- 1.1. Product identifier  
Trade name: Expanded Perlite TP 0-0,5;TP 0-1;TP 0-4; TP 3-6
- 1.2. Relevant identified uses of the substance or mixture and uses advised against: The product is used as insulation material
- 1.3. Company/ undertaking identification  
Company: ANZO Műszaki, Kereskedelmi és Szolgáltató Kft.  
H-3525 Miskolc Szivárvány u. 2  
Telephone: +36 46 320 910  
Telefax: +36 46 320 910
- 1.4. Emergency telephone number  
+36 30 9251 450  
Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ): 06 1 476 6464  
0-24 h telephone number: 06 80 20 11

**2. Hazards identification**

- 2.1. Classification in accordance with Regulation (EC) No 1272/2008  
R-mondat Jelölés The substance does not meet the criteria for a classification as hazardous in accordance with the current version of Directive 67/548/EEC.
- 2.2. Label elements  
in accordance with Regulation (EC) No 1272/2008  
Hazard pictogram(s): No pictogram  
Signal word(s): No signal word  
Product identifier: Not required  
Hazard statements: Not required  
Precautionary statements: Not required  
Supplemental label for certain mixtures: Not required
- 2.3. Other hazards  
No special hazards have to be mentioned, however avoid formation of dust during processing and treatment.  
The dustiness of the product has been determined in accordance with DIN 33897-2 and EN 15051-Method B. Classification of dustiness according to EN 15051-Method B:Dusting propensity concerning respirable dust: moderate  
Dusting propensity concerning inhalable dust: high The criteria for identifying substances as PBT and vPvB set out in Annex XIII of Regulation (EC) No 1907/2006 shall not apply to inorganic substances.  
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**3. Composition/information on ingredients**

- 3.1. Main constituent of the substance: SiO<sub>2</sub> 68,0-75,0 %
- |                                                     |             |
|-----------------------------------------------------|-------------|
| Al <sub>2</sub> O <sub>3</sub>                      | 10,0-12,0 % |
| K <sub>2</sub> O                                    | 3,2-4,5%    |
| Na <sub>2</sub> O                                   | 2,8-4,5%    |
| valamint: Fe <sub>2</sub> O <sub>3</sub> , CaO, MgO |             |

REACH registration number:

According to Annex V(7), perlite is exempted from the obligation to register, if it is not chemically modified.

**4. First aid measures**

- 4.1. Description of first aid measures  
General information

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Emergency eyewash should be provided in the immediate working surroundings.

In case of inhalation

If liberated dust is inhaled, ensure supply of fresh air.

In the event of symptoms take medical treatment.

In case of contact with skin

No special measures necessary.

In case of contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do.

Do not rub eyes, cornea damage is possible by mechanical stress.

In case of ingestion

No special measures necessary.

4.2 Most important symptoms and effects, both acute and delayed

If liberated dust is inhaled: irritant effect on the respiratory tract, e.g. burning, coughing.

In case of contact of liberated dust with eyes: burning eyes, tears.

4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically. No information available.

#### 5. Firefighting measures

5.1. Extinguishing media

5.2. Suitable extinguishing media

Product itself is non-combustible. Fire extinguishing method of surrounding areas must be discussed

5.3. Unsuitable extinguishing media

Product itself is non-combustible. Fire extinguishing method of surrounding areas must be discussed.

5.4. Special hazards arising from the substance or mixture

No special hazards have to be mentioned.

5.5. Advice for firefighters

Wear self-contained breathing apparatus.

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#### 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Avoid formation of dust. Ensure adequate ventilation.

Keep away from unprotected people.

6.2. Environmental precautions

No special measures necessary.

6.3. Methods and material for containment and cleaning up

Pick up mechanically. Avoid formation of dust. Do not use compressed air for cleaning surfaces or clothing. Use approved industrial vacuum cleaner for removal

#### 7. Handling and storage

7.1. Precautions for safe handling: Avoid formation of dust. When filling, transferring or emptying of containers, adequate suctioning close to workplace necessary. Do not compress empty bags, except when contained in another clean bag. Dust deposits that cannot be avoided must be taken up regularly. Advice on general occupational hygiene Do not inhale dust. Use suitable barrier skin cream in case of sensitive skin. Emergency eyewash should be provided in the immediate working surroundings.

7.2. Conditions for safe storage, including any incompatibilities

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Advice on protection against fire and explosion

No special measures necessary. Requirements for storage rooms and vessels

Keep only in the original container. Keep container tightly closed.

Further information on storage conditions Store in a dry place.

7.3. Specific end use

Recommended use: as lightweight aggregate insulation.

## 8. Exposure controls/personal protection

8.1. Control parameters

CAS number Identification Limit values Remarks

93763-70-3 perlite 4 mg/m<sup>3</sup>

5 mg/m<sup>3</sup> inhalable aerosol

10 mg/m<sup>3</sup> inahalable aerosol

10 mg/m<sup>3</sup>

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See also subsection 7.1.

In case of dust formation exhaust ventilation at the object (initiation point) is necessary. In case of release of dust, additionally comply with the protective measures in accordance with TRGS 559.1 The methods for measuring chemical agents in workplace atmosphere must meet the general requirements of EN 481, EN 482 and EN 689. Individual protection measures, such as personal protective equipment.

Eye/face protection

Tightly fitting safety glasses in accordance with EN 166 (in case of dust formation).

Skin protection Hand protection:

Work gloves for protection against mechanical damage.

Body protection: Not necessary.

Respiratory protection

Filtering half mask to protect against particles FFP1 - FFP3 in accordance with EN 149 (in dust-laden atmosphere).

Maximum use concentration for substances with occupational exposure limit values (OELV): TP3-6-filter up to max. 2 x OELV; TP0-4-filter up to max 4x OELV. TP0-1-filter up to max 10x OELV; TP0-0,5-filter up to max. 30x OELV.

## 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid (granulation 0/1)

Colour: white

Odour: odourless

Odour threshold: no data available

pH (as supplied) (20°C): 6 - 8.5

pH (of an aqueous solution) (20°C): not relevant

Melting point/freezing point (°C): approx. 1400

Boiling point and boiling range (°C): not relevant

Flash point (°C), closed cup: not relevant

Evaporation rate: not relevant

Flammability (solid, gas): not relevant

Upper flammability or explosive limit: not relevant

Lower flammability or explosive limit: not relevant

Vapour pressure (20°C) (hPa): not relevant

Vapour density (20°C): not relevant

Density (g/cm<sup>3</sup>): 2.0 - 2.2

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Bulk density (kg/m<sup>3</sup>): 55 - 100  
Solubility in water: < 1 wt %  
Soluble in: not determined  
Partition coefficient: n-octanol/water: not relevant  
Auto-ignition temperature (°C): not relevant  
Temperature-resistance (°C): - 250 up to + 800  
Dynamic viscosity (mPa · s) (20°C): not relevant  
Explosive properties: not explosive  
Oxidising properties: not relevant

9.2. Other information: None.

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#### 10. Stability and reactivity

- 10.1. Reactivity: No data available for the product.
- 10.2. Chemical stability: The product is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
- 10.3. Possibility of hazardous reactions: When used as intended, no hazardous reaction known.
- 10.4. Conditions to avoid: When used as intended, no particular conditions known.
- 10.5. Materials to avoid: Avoid contact with hydrofluoric acid.
- 10.6. Hazardous decomposition products: No hazardous decomposition products known.  
For hazardous combustion products see subsection 5.2.

#### 11. Toxicological information

- 11.1. Information on toxicological effects  
Toxicokinetics, metabolism and distribution: No data are available for the product.
- 11.2. Acute effects (acute toxicity, irritation and corrosivity)  
LD50 rat, oral (mg/kg) No data available.  
LD50 rat, dermal (mg/kg) No data available.  
LC50 rat, inhalation (mg/l/4h) No data available.  
Irritant effect on skin No data available.  
Irritant effect on eyes No data available.
- 11.3. Sensitisation: No evidence of sensitive properties of perlite has been found.
- 11.4. Repeated dose toxicity: No data available.
- 11.5. CMR effects (carcinogenicity, mutagenicity, toxicity for the reproduction)  
Carcinogenicity No data available.  
Mutagenicity No data available.  
Toxicity for the reproduction No data available.
- 11.6. Comprehensive evaluation of the CMR properties of substances subject to registration: No data available.
- 11.7. Information on likely routes of exposure  
If liberated dust is inhaled: irritant effect on the respiratory tract, e.g. burning, coughing.  
In case of contact of liberated dust with eyes: burning eyes, tears.
- 11.8. Interactive effects: No information on interactive effects available for the product.
- 11.9. Delayed and immediate effects as well as chronic effects from short and long-term exposure: If liberated dust is inhaled: irritant effect on the respiratory tract, e.g. burning, coughing. In case of contact of liberated dust with eyes: burning eyes, tears.
- 11.10. Interactive effects: No information on interactive effects available for the product.

#### 12. Ecological information

- 12.1. Ökotoxicitás Toxicity  
Aquatic toxicity:  
LC50 (fish) No data available.  
EC50 (daphnia) No data available.  
IC50 (algae) No data available.  
Behaviour in sewage works:  
Inorganic product, insoluble in water. Can be mechanically refined for the most part in waste water cleaning plants.
- 12.2. Mobility in soil: The product has not been tested.
- 12.3. Persistence and degradability

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- The product is insoluble in water.  
The methods for determining the biological degradability are not applicable to inorganic substances.
- 12.4. Bioaccumulative potential  
The methods for determining the bioaccumulative potential are not applicable to inorganic substances.
- 12.5. Other adverse effects  
Ozone depletion potential No data available.  
Photochemical ozone creation potential No data available.  
Global warming potential No data available.  
AOX-hint Not to apply.
- 12.6. Further information  
Chemical oxygen demand (COD) No data available.  
Biochemical oxygen demand (BOD5) No data available.  
Contains according to the formulation following com  
pounds of directives 2006/11/EC and 80/68/EEC:  
None.

### 13. Disposal considerations

- 13.1. Waste treatment methods  
Waste disposal according to official state regulations.  
Consult the local waste disposal expert about waste disposal.  
Disposal operations/recovery operations according to Directive 2008/98/EC  
Disposal operations D 1 Deposit into or on to land  
Recovery operations R 10 Land treatment resulting in benefit to agriculture or ecological improvement. Properties of waste which render it hazardous in accordance with Annex III of Directive 2008/98/EC Not relevant.
- 13.2. Contaminated packaging  
Recommendation: Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.  
Recommended cleansing agent: Remove adhering residues mechanically.  
Packaging that cannot be cleaned:  
EC waste code: 15 01 02  
Waste notation: Plastic packaging
- 13.3. EC waste code 17 06 04  
Waste notation Insulation materials other than those mentioned in 17 06 01 and 17 06 03  
Alternative:  
EC waste code 17 05 04  
Waste notation Soil and stones other than those mentioned in 17 05 03

### 14. Transport information

- 14.1. UN number: No dangerous good in accordance with the UN Model Regulations (ADR/RID/ADN/IMDG/ICAO/IATA).
- 14.2. UN proper shipping name: Not relevant.
- 14.3. Transport hazard class(es): Not relevant.
- 14.4. Packing group: Not relevant.
- 14.5. Environmental hazards: Not relevant.
- 14.6. Special precautions for user: Not relevant.
- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not relevant.

### 15. Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Information regarding relevant Community provisions  
Regulation (EC) No 1907/2006: Annex V(7) (perlite)(exemptions from the obligation to register)  
Information regarding national laws/national measures that may be relevant (for Hungary only)  
Munkavédelem: a 2007. évi LXXXII. törvénnyel, a 2004. évi XI. törvénnyel és az 1997. évi CII. törvénnyel módosított 1993. évi XCIII. törvény a munkavédelemről.

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Kémiai biztonság: a 2004. évi XXVI. törvénnyel módosított 2000. évi XXV. törvény a kémiai biztonságról; a 38/2008. (X.3.) EüM rendelet, az 52/2007. (XI.30.) EüM, a 26/2007. (VI.7.) EüM, a 33/2004. (IV.26.) EszCsM, a 30/2003. (V.21.) EüM rendeletek a veszélyes anyagokkal és a veszélyes készítményekkel kapcsolatos egyes eljárások, illetve tevékenységek részletes szabályairól szóló 44/2000. (XII.27.) EüM rendelet módosításáról; az 58/2007. (XII.22.) EüM-SZMM együttes rendelete a munkahelyek kémiai biztonságáról szóló 25/2000. (IX.30.) EüM-SZCSM együttes rendelet módosításáról.

Hulladék: a 2004. évi XXIX. törvénnyel módosított 2000. évi XLIII. törvény a hulladékgazdálkodásról; 98/2001.(VI.15.) Kormányrendelet a veszélyes hulladékkal kapcsolatos tevékenységek végzésének feltételeiről, és a 16/2001. (VII. 18.) KÖM rendelet a hulladékok jegyzékéről; a 195/2002. (IX.6.) Kormányrendelettel módosított 94/2002. (V.5.) Kormányrendelet a csomagolásról és a csomagolási hulladék kezelésének részletes szabályairól.

Tűzvédelem: az 1996. évi XXXI. törvény a tűz elleni védekezésről, a műszaki mentésről és a tűzoltóságról; a 9/2008. (II.22.) ÖTM rendelet.

**16. Other information**

16.1. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up materia.

Identification of the substance/mixture and of the company/undertaking

16.2. Changes which have been made to the previous version of the safety data sheet.

Vésztői Zoltán s.k.  
Ügyvezető

Miskolc, 2015 április 18.